

## Means test system under fire

by Ngain Creguer

The Committee of Vice Chancellors and Principals is to call for a phased withdrawal of the system of means testing student grants, it is understood.

Although the committee believes that a claim for outright abolition of the means test would be politically unacceptable for any government, it hopes to get a firm commitment so that the present system can be ended by about 1982.

The committee is preparing a detailed memorandum to present in the Department of Education and Science pointing out different ways of changing the system.

One favourite suggestion likely to be put forward is that the minimum grant should be progressively increased so that Vice Chancellors are largely instrumental in persuading

the Government earlier this year to raise the minimum grant for maintenance awards from £80 to £200.

Another possibility is to raise the starting point for parental contribution, which now stands at a residual income (after deductions for dependants, mortgages and superannuation) at £3,800 a year.

The committee is known to be looking at a proposal to bring forward the age at which a student is said to be independent and whose grant is therefore assessed on his or her own income rather than that of the parent.

It is likely that the committee will suggest changing the age from 25 to 23 as a start.

Although such a move would initially only affect a small number of students it would be an encouragement in relation to older students and would help to show

up glaring anomalies in the system.

Vice chancellors are quietly pleased that the value of the student grant has to some extent been restored in recent years but are concerned that these gains are lost if parents either cannot or will not pay their full contributions.

According to a DES-commissioned survey by the Office of Population Censuses and Surveys in 1975, 84 per cent of students (excluding those living at home) had their grants reduced by an assessed parental contribution and of these 73 per cent did not get the full payments from their parents.

Almost 50 per cent of these students faced deficits of up to £75 and for a small number the deficit was £250. The cost of abolishing the means test is estimated at £55 million if account is taken of the child tax allowance reductions.

Leader, page 31

## Marked drop in number of overseas students

Entrants to postgraduate teacher training courses will outnumber their undergraduate colleagues for the first time this year but some other institutions have noticed slight falls in overall numbers of postgraduates.

Overseas student admissions to universities have markedly fallen in comparison to last year and admissions officers are blaming this on changes in regulations which have made it more difficult to get grants. Some administrators say that higher standards of home students have also reduced overseas students' intakes.

At Essex University there has been a 20 per cent fall in the numbers of new overseas undergraduate admissions. Surrey University has seen a fall of 28 per cent in overseas admissions which it says is due partly to the problems of finance and partly because of the increasing higher quality of home student which is being attracted.

Postgraduate numbers are slightly down again because of financial problems. Undergraduate numbers are on target.

Loughborough University has seen a very slight fall in overseas admissions and no real change in the postgraduate intake. Leeds University has seen a small drop in overseas students numbers.

Universities have had no problem in reaching their undergraduate targets. Many report great buoyancy in science subjects. Swanson, which has had difficulty for the last few years, in filling its science places, has noticed a marked increase in science admissions this year.

Leeds says the physical sciences and combined studies in science have done very well. Essex, Reading

and Strathclyde also point to the success in engineering admissions. Some universities report a trend away from law studies and some of the social sciences. Arts remains steady.

Final figures for recruitment to BEd and Certificate courses are still to be completed at the Central Register and Clearing House but they are likely to be close to the 9,500 students. Fears that uncertain job prospects would lead to a slump have not been realized and early applications for next year's courses have increased.

The total of 9,363 students joining Postgraduate Certificate in Education courses this term is almost identical to last year's figure. Of those, 4,932 are at universities (fewer than last year) and 4,431 are at colleges or polytechnics (seven fewer than in 1977).

Numbers joining the final Certificate courses or starting a BEd through the Clearing House will be considerably lower than the total for the PGCE but approximately 400 university teacher training undergraduates will bring the totals close together.

The trend towards the one-year postgraduate course, which will provide more than half of all new qualified teachers by 1981, has been criticized by the National Association of Teachers in Further and Higher Education, which believes a longer training is necessary. The association also fears the emergence of a two-tier system whereby secondary school teachers are trained on PGCE courses while BEd graduates go to primary schools in the main.

## Decrease likely in applications

About a third of the expected applications for the 1979 university entry are now in. It seems likely that the numbers of home candidates will be smaller than last year, despite the increase in the size of the age group.

According to figures released by the Universities Central Council on Admissions there is a 2 per cent decrease in home applications, comparing November 1 with the same time last year.

The 18.5 per cent increase so far in applications from overseas students, which UCCA reported last month, is still holding up, but they stress that this may be due to promises in applying.

By November 1, 30,992 men had applied for places, compared with 31,811 the same time last year, a decrease of 2.6 per cent. The comparable figures for women show an increase of 2.7 per cent. Total applications are down by 0.5 per cent.

## Ruskin College principal named

The new principal of Ruskin College at Oxford is to be Mr John Hughes, the present vice-principal. He will take over when Mr Billy Hughes retires as principal next September.

Mr John Hughes, aged 52, has been at Ruskin since 1957 and became vice-principal of the adult education residential college in 1970. At present he is head of the college's trade union research unit and has been seconded part time to the Prices Commission of which he is deputy chairman. He is also a member of the Industrial Development Advisory Board.

Author of several Fabian pamphlets, he has acted as an adviser to both the Trades Union Congress and the Labour Party.

Mr Billy Hughes will be retiring after 25 years at Ruskin, during which time the student population has doubled in size, to a full time roll of 180.

Mr Billy Hughes, who retired on his 65th birthday, is planning to continue his other activities in adult continuing education. He is standing for re-election as president of the Workers Educational Association and will be continuing his work for the advisory council.

He has also been invited to become one of six independent members of the Schools Council. He intends to write a book about the impact Ruskin and its students have made on British social and political life.

## Press campaign

Staff and students at London University are campaigning to prevent the sale of the Athlone Press. A decision which publishes other domestic books which might not be taken at a meeting and the future of the Press will be decided by the Committee of the Court and Senate for Collective Planning.

This approach will also encounter strong opposition at the NUS conference next month. The National Organization of Labour Students, for example, has already criticized both the original Government plans and the alternative proposals, which it considers unrealistic.

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## DES forced to reduce '1990s' forecasts as recruitment falls

Peter David

Plans for the future higher education have been revised dramatically because the DES for places has continuously failed to come up to expectations.

Department of Education and Science planners have abandoned forecasts of student numbers which the recent discussion document "Higher Education in the 1990s" was based on.

First indications of a serious fall in recruitment were disclosed in the DES (October 27) on internal DES figures showed a 10 per cent fall in polytechnic and college running some 9,000 behind targets.

Further evidence that the anticipated increase in demand has not materialized has now persuaded the DES that the "central projection" of student numbers at the end of the 1990s discussion document is no longer tenable.

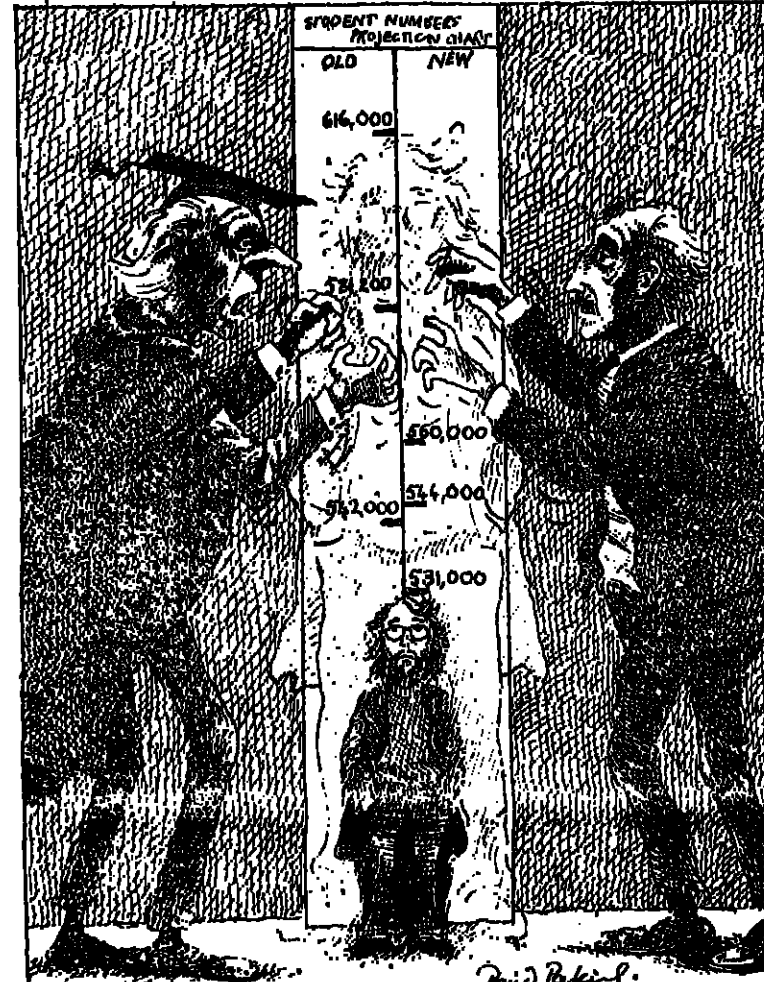
A first result of new and longer projections produced within the department is that last year's 1990s target of 31,000 students in 1981 is to be cut back until 1982-83. The target for the public sector—310,000 in 1981 and 250,000 in 1990—will not be changed. But the DES fears that even by 1981 it may not be met, and will intensify competition between the sectors.

A second result of the changed calculations is that the entire public sector on the future higher education—requests to which are analysed by the department—will have to be revised. Three substantially lower projections based on different patterns of demand have been produced confidentially.

One "low" projection anticipates a continuing decline in the APR to about 12.6 per cent in 1982-83, bringing student numbers then to only 511,000 in place of the 542,000 in the earlier low variant.

The DES has, however, balked at the notion of revising its targets into the 1990s. It regards the APR as so unpredictable as to make sensible planning on that timescale impractical. A single percentage rise in the APR before the early 1990s could add up to 31,000 students.

But the new projections for the early 1980s make it clear that the assumptions in the discussion document of a rise in the APR to 21 per cent by 1994 (high variant) or even



18 per cent (central variant) are highly optimistic. One of the most significant factors is the disappointing number of school-leavers achieving qualifications which would enable them to enter higher education. The DES has cut its discussion document estimate of 155,500 in 1983-84 by 5,000.

The decision to retain for the present existing plans for the distribution of numbers between the polytechnics and the universities is being interpreted as a gesture of faith in the public sector where the bulk of the recruiting shortfall lies. The University Grants Committee regards itself as on target—if not several thousand students ahead—for its share of the 560,000 total.

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## OU in spin over proposed finance switch

by Maggie Richards

The Open University is contemplating the transfer of funding responsibility from the Department of Education and Science to the University Grants Committee.

At present the OU is the only university in Britain to be directly funded by the DES, and has been since its inception nine years ago.

The proposal, however, has received a fairly hefty knock from the university's senate, which last week decided to oppose it. A final decision rests with the OU council, which is scheduled to meet for discussions next Tuesday.

The OU has consistently agreed that integration into the UGC system should eventually take place, but that the development of the undergraduate programme and the university's likely involvement in continuing education meant that the time was not yet ripe.

What seems to have prompted present consideration by the OU council is a recent request by the DES for a direct internal audit, which has been viewed as unacceptable in principle. A university spokesman refused to comment on this issue this week.

Advantages and disadvantages of cementing a new relationship with the UGC were set out in a paper for last week's senate meeting by Sir Walter Parry, the vice-chancellor.

Senate was asked by the Open University council to advise on relevant academic considerations. On grounds of status it was argued that the university was approaching its tenth anniversary and had established itself sufficiently to be accepted as a recognized part of the entire system.

UGC membership, it was claimed, would also aid the research programme. One of the main counter-arguments put forward was that the Open University had received comparatively good treatment from the DES in the past, with its recurrent grant estimated at £36m this year.

To become one of 45 universities competing for funding might substantially affect its position. Fears were also expressed at senate about possible conflict with the interests of other conventional universities, particularly in the area of continuing education at sub-degree level, to which the Open University is heavily committed.

continued on back page

## Lecturers take action on code for redundancy

by John O'Leary

College lecturers are being presented with a programme of action to counter recent advice to local authorities on redundancy arrangements. This signals growing concern in the National Association of Teachers in Further and Higher Education over the implementation of the so-called Crombie Code.

The association has taken the unusual step of issuing all its branches with a detailed commentary of guidelines drawn up by the Local Authorities' Conditions of Service Board. The LACSAB document, published in the summer, was an attempt to standardize the approach to redundancies as a result of cuts in teacher training.

Widely differing approaches to closing colleges has also become a concern to NATFHE, which is still analysing replies to a questionnaire on the subject. But the association has criticized the LACSAB guidelines on several counts, claiming that they would only worsen an already confused situation since much of the advice could be challenged at tribunals and was at odds with previous court decisions.

In its commentary, NATFHE recommends branches to resist several of the LACSAB approaches if they are taken up by local authorities. On a number of issues branches are asked to report all developments to the association's head office, which will monitor progress around the country.

The major points of conflict are the suggestion that the Crombie Code might be extended to cover redundancies outside teacher education, the interpretation of which redundancies are directly attributable to national policy and the designation of jobs still meriting compensation despite the existence of safeguarded salaries. This last issue is described as the most contentious in the LACSAB guidelines and is likely to lead to a new rash of tribunals to establish which jobs within the same authority can be regarded as comparable.

Some areas, such as long term compensation, remain to be tested in tribunals, while others may hinge on cases now being contested. Although the NATFHE commentary agrees with the advice given on many topics, the areas of disagreement are sufficient to suggest continuing clashes over many points.

## NEXT WEEK

Eight page special report on The Netherlands

David Jobbins profiles Huddersfield Polytechnic

Peter Worsley reviews Richard Hoggart's book on Unesco

The Proper Study of Psychology Henri Cartier-Bresson exhibition at the Hayward



A City University student makes an offering to a marshal of this year's Lord Mayor's Show in London. A float from the university took part in the Lord Mayor's procession.

## Minister shelves union finance plans

Plans to change the system of financing student unions are to be shelved for a year. Mr Gordon Oakes, Minister of State for Higher Education, has decided to put back the target date for the introduction of new arrangements from 1979 to September 1980.

An announcement on this, which is in draft form at the Department of Education and Science, follows months of pressure from the National Union of Students. With university vice-chancellors and polytechnic directors also uneasy about the original timetable, no agreement could be reached in time for consideration in the imminent announcement of the Rate Support Grant.

Mr Trevor Phillips, NUS president, met Mr Oakes last week to put again the union's case that more time was needed to consider how best to meet the requirements of public accountability and equity. Although the two-part system proposed by the DES was welcomed by

Mr Phillips' predecessor, Miss Sue Silman, the union's attitude has since cooled. Many university unions, in particular, fear that this system would lead to unnecessary conflict.

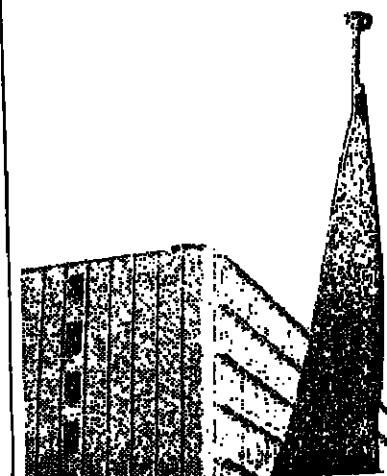
The postponement has probably come too late to forestall an emergency NUS conference on the subject. The union's executive is obliged to go ahead with the conference on December 2 unless the 13 local unions which called it change their minds. There is growing pressure on them to do so because of claims that the nearness of the regular conference only six days later will make it impossible for many delegates to attend, thus rendering the conference unrepresentative and unnecessary.

Alternative proposals on finance have now been agreed by the NUS executive, based on a combination of a system suggested during the summer by Mr Phillips and another package put forward by Sheffield University students. This would

allow the method of paying union fees to remain unaltered but would establish a national body, composed equally of the funding authorities and student representatives to recommend guidelines to local committees.

A committee at each institution would set the student union fee, taking into consideration guidelines on the minimum income and physical space recommended for every union, the accepted areas of spending, the percentage range for each sector in which an increase would be expected to fall. The student representatives of the college authorities and the funding authorities.

This approach will also encounter strong opposition at the NUS conference next month. The National Organization of Labour Students, for example, has already criticized both the original Government plans and the alternative proposals, which it considers unrealistic.



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# Government 'needs firm strategy on literacy'

by Maggie Richards

A firm Government initiative similar to the one which created the Open University is needed to put adult basic education on the map. Efforts so far have only provided ineffectual and short-term solutions to long-term problems.

That is the conclusion of the National Federation of Voluntary Literacy Schemes in its submission to the Advisory Council for Adult and Continuing Education.

The federation calls on the advisory council to support its demand for the establishment of a major new Government agency with responsibility for funding a national programme of adult basic education.

Dealing with adult literacy, it says, the campaign has failed to persuade Government and local education authorities of the need for a long-term strategy.

The federation has produced its own six-point charter of proposals for provision:

- Mandatory grants to enable adults to attend full-time courses for up to three years.
- Paid release for literacy classes—students should not have to wait for broader legislation on paid educational leave.
- Immediate provision of literacy courses in workplaces.
- Creches where necessary.
- Literacy courses designed for specific groups—women, ethnic minorities, the disabled.
- Coordination between colleges and adult education centres, working to a consistent standard.

"Our students should have the same security of provision as that enjoyed by students in further and higher education", it states.

Looking at other areas of adult basic education, the federation says that literacy provision resembles that of literacy for the visually impaired in the amount and quality of courses available in mathematics and English as a second language. There is also a substantial demand for part-time, fresh-start courses at a post-literacy level.

Its report highlights an additional three areas which might be included in the sector—social and political

education; making them more articulate, and study techniques. Advice and counselling services are seen as an integral element of a long-term strategy for adult education in general.

In conclusion, the federation states: "We believe that the scale of resources required to adequately finance a programme of adult basic education can only be guaranteed by the establishment of a major new Government agency on a permanent footing and analogous to the Training Services Department in its executive powers and the size of funds at its disposal."

"We note that the only initiative taken in recent times in the field of adult education that was launched with anything like the scale of finance required for basic education was the establishment of the Open University."

Another submission to the advisory council has come from the Workers' Educational Association. The WEA urges that adult basic education should not merely be regarded as a "survival kit" for the disadvantaged, but should aim to provide opportunities for adults to acquire a firm foundation for further development.

Its submission suggests the defunct Adult Literacy Resource Agency should form the model for a future long-term agency for the whole sphere of adult basic education.

Local education authorities should accept a special responsibility for adult basic education, says the WEA. Special forms of assistance should also be available to immigrants.

The WEA says its own programme of work in the field of basic education has been growing for a number of years, and now accounts for about 10 per cent of its total provision. This includes education in an industrial context, and courses in social and political skills.

This commitment to adult basic education should continue, says the submission.

"It is an area in which voluntary workers could be actively involved, with the example of the literacy scheme before us. The continued involvement of the WEA may be particularly important, with its flexibility and its ability to respond to local demands."

Higher education conference

# Royal Charters for polys urged

Local authorities should seek the help of the Department of Education and Science to acquire Royal Charters for their polytechnics, Mr David Bethel, chairman of the Committee of Directors of Polytechnics, said this week.

He told a conference at the Loughborough University of Technology that despite the difficulties polytechnics had experienced at the hands of local government, authorities should retain responsibility for higher education. But to prove their responsibility they should seek charters for their polytechnics.

A statement by even one local education authority to this effect would revolutionize the maintained sector and remove the petty interference in academic affairs which is indulged in by some local authorities," he said.

Earlier Mr Bethel called for a relaxation of the control exercised over polytechnic courses by the Council for National Academic Awards. The CNA had helped to maintain credible standards in the polytechnics, but after 10 years of tutelage it was time for polytechnics to take more direct responsibility for their own courses.

"One way this could be achieved is by the Privy Council granting charters to individual polytechnics which confers the right to award their own degrees with each degree accredited by the CNA or a successor body."

"I see no reason why those degrees should not be re-accredited every quinquennium, and I see no reason why all degrees in all institutions should not be subject to accreditation."

Mr Bethel claimed that the evidence available suggested that unless institutions had the main responsibility for determining their own standards, standards were likely to be at risk.

Later the conference was warned that a relaxation in polytechnics away from part-time sub-degree work was beginning to jeopardize the comprehensive tradition and could do immeasurable harm to higher education.



Professor Wallace—polytechnics and universities' work is different

Professor Bill Wallace, chairman of the education and development committee of the Association of University Teachers, said that between 1970 and 1975 the proportion of polytechnic students on first degrees had risen from 46 per cent to 58 per cent.

During the same period the proportion of advanced work rose from 50 to 95 per cent; the proportion of full-time students on advanced courses rose from 58 to 63 per cent and the proportion doing arts courses fell from 22 to 10 per cent.

This swing away from comprehensiveness and a concentration on degree and full-time work would threaten the valuable role of polytechnics in linking the world of further education to that of the universities, Professor Wallace said.

Just when demographic changes were making recurrent education important, the polytechnics appeared to be abandoning that role.

Professor Wallace urged polytechnics to accept that although there were areas of overlapping activities, polytechnics were different types of

institution from universities. Although polytechnics did research, for example, they probably never did it on the scale of the universities.

In 1976-77, he said, research accounted for £2.8m, 1.2 per cent of polytechnic expenditure. A year earlier universities spent £6.7m, 12 per cent of their income, on research. In individual polytechnics research expenditure ranged from £7,000 to £400,000, in universities the range was from £140,000 to £4.8m (excluding London).

A similar pattern was followed by the research councils, which accounted 98 per cent of their budget to universities and only 2 per cent to polytechnics. It can be argued that the distribution is wrong," Professor Wallace added, "but that is the nature of the expenditure."

The greater university study higher level work was also reflected in the number of postgraduate students. Between 1970 and 1975 the number of polytechnic postgraduates had risen by 175 per cent compared with 17 per cent in the universities.

One of the most important features of the polytechnics—their comprehensiveness—was being threatened, Professor Wallace said. In 1975 39 per cent of polytechnic full-time students were on non-degree work, and 37 per cent of degree students were attending part-time. This was proper and valuable, and quite different from the universities.

But the gradual movement of polytechnics away from part-time and sub-degree courses might be a reason for the public sector beginning to lose sight of student numbers, he said. The 1972 White Paper aimed equal numbers in the universities and the maintained sector; in 1977 the Government changed the 1971 target to 55 per cent in universities and 45 per cent in polytechnics and colleges.

# Sexes concur on science ability

Report by Peter Davis

Eight women questioned in the University of Manchester Institute of Science and Technology believed that men made the top priorities. One in 12 men did not know why they had gone to university but all of the women were able to give a solid reason.

The students were asked, if they thought there should be more women students, how could the position be altered? Mr Harrison said: "It is interesting to note that women respondents scarcely mentioned the need to change society fundamentally. Many more practical weaknesses or points were made, especially with reference to school. Only three respondents advocated positive discrimination and only one mentioned the need to increase the number of women teachers within UMIST itself."

One of the recommendations arising out of the survey is that at the very least, women applicants whose qualifications are equal to those of male applicants should be encouraged. The questions as to why there are so few women academic staff should be raised more fully.

It is also suggested that the institute should look at the prospectus it gives to schools. "The prospectus for UMIST's new, high-flying course in engineering, manufacturing and management is concerned with the five M's—men, money, machines, methods and materials. A 1976 prospectus for postgraduates carries a series of photographs which, it is said, subtly divides the sexes and shows women in the knitting laboratory."

According to the survey, inadequate nursery provision is preventing applications from women with children. UMIST Women's Survey, Lyndon Harrison, research officer, October 1978, published by UMIST Union.

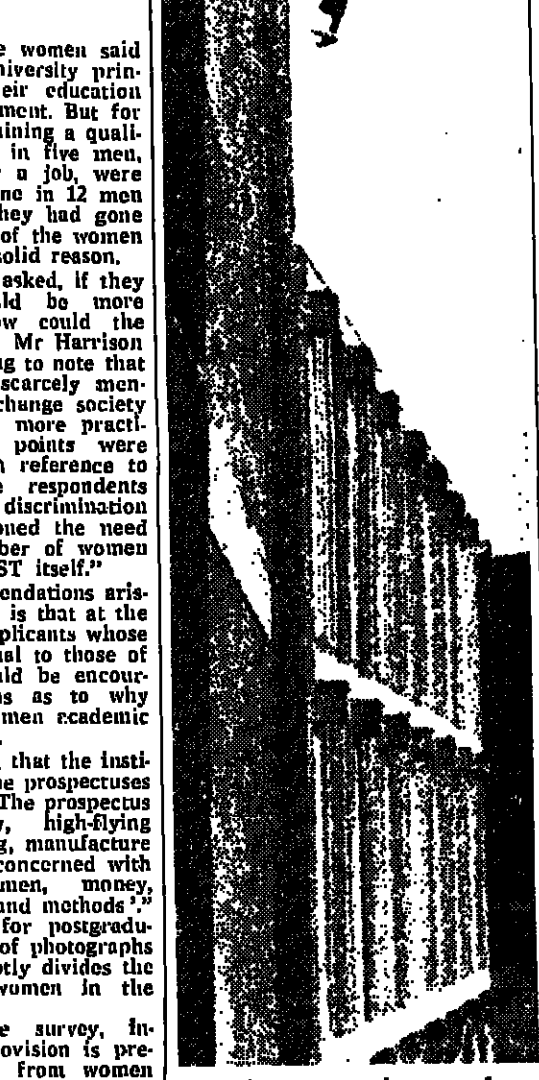
More than half the women said they had gone to university principally to extend their education and personal development. But for two in five men, obtaining a qualification and for one in five men, becoming trained for a job, were the top priorities. One in 12 men did not know why they had gone to university but all of the women were able to give a solid reason.

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Dangling man—volunteers from Essex University Mountaineering Club scaled the north wall of the university library on Sunday.

# Oxford opinion against proposed N and F levels

Congregation of Oxford University will be asked on December 5 to tell the Standing Conference on University Entrance that there is "a remarkable consensus of opinion" against the proposals for N and F level examinations.

In submitting a general resolution to this effect, the Hebdomadal Council announced in the University Gazette on Thursday (November 16) that the consensus was arrived at after consulting more than 40 bodies in the university.

An explanatory note says that since 1974, there has been a much stronger and more general questioning of the basic assumption underlying the N and F proposals, namely that breadth of examined study is of overriding importance in the sixth form. The university remains convinced that for many able 15 to 16-year-olds, the opportunity for specialization afforded by A levels represents not a straightjacket, but both a highly satisfactory framework for the development of their own interests and an appropriate preparation for degree work.

The N and F proposals are widely seen as an unsatisfactory compromise between two schools of thought—the one advocating the development of sixth-form examinations towards a five-subject model, and the other favouring developments based on the retention and improvement of A levels.

The university overwhelmingly supports the latter approach. Only in fine art, biochemistry and geology has there emerged a preference for N and F levels.

The annual experience in Oxford of examining nearly 7,000 candidates who make Oxford their first choice, does not suggest that problems of inadequate breadth or premature choice—where they occur—are on a scale or of such severity to warrant the overthrow of the present system. It is in any case questionable whether the N and F proposals could resolve such problems.

In practice F level performance would become the principal factor determining university entrance. Candidates with two F levels would, however, have a narrower choice of university courses than those with three A levels.

Some schools, especially those with well-established academic sixth forms, would accordingly enter candidates for three or more F levels.

In other schools the N-level programme would tend to dominate the curriculum with deleterious effects on the candidates' performance at F level and their preparation for university.

Hebdomadal Council and the General Board of the Faculties, however, consider that the time has come for Westminster's certificate of education to be validated by the CNA.

Giving their reasons in the University Gazette, the trustees say the Westminster certificate is different from the one taught in the Department of Educational Studies, the staff of which play little part in validation.

The university's attitude must be influenced by the fact that in two recent years the Westminster certificate would be the only external course dealt with by the Department of Education.

Three of the original four colleges—Culham, which closes at the end of Trinity Term next year, Lady Spencer Churchill College, now part of Oxford Polytechnic, and Milton Keynes, which has ceased registering its BEd students for the Oxford degree and looks to the CNA for validation—will have no formal connection with Oxford after 1982.

The decision, he said, had been taken without the acquiescence of the college, which has always valued its association with the university. "We have always felt that there are solid academic reasons for continuing the association in the postgraduate area, because in some ways, we complement each other."

The authors urge a review of existing access procedures to provide a more uniform and informative approach for prospective students.

Other developments which might encourage entry they suggest, include the use of computer information banks; closer interaction between institutions; and a greater awareness of developments in educational counselling.

Teaching at a Distance, autumn edition. Available from Keith Tibbenham, RTS, Open University, MK7 6AA.

# Engineering apprentice plan attacked

Any new scheme for training engineering apprentices must maintain existing opportunities for studies at further education colleges to be pursued to current levels, the National Association of Teachers in Further and Higher Education says.

Criticising plans forwarded by the Engineering Industry Training Board, the association says: "NATFHE would be opposed to any reduction in the present period of further education."

The training period should be related to the needs of employers and not to specific age. The period of further education is already too limited and should probably be extended."

NATFHE insists that any new arrangements must make sure that successful students are able to follow appropriate further education courses—including those organised through TEC. The board's proposals for streamlining apprenticeships are also criticized for the suggestion that schools should take on training 14 to 16-year-olds in specific engineering skills.

# Group to define life skills

Confusion over the term "social and life skills" and fears among teachers of pernicious educational or anti-educational policy is emerging, undebated has led to the formation of a study group by the Further Education Curriculum Review and Development Unit.

The group aims to produce an analysis of the current situation to help tutors and scheme organizers in taking decisions and making plans in their local circumstances. Rather than attempting to be prescriptive, it will describe alternative views and their consequences and implications.

"Development in provision for the 16-19 age group are necessarily happening—so quickly at the moment that teachers, trainers and others directly involved with young people are too busy setting up on to 'have time for' these philosophical matters or even to work out the longer term practical consequences of current activity", the study group says.

The term "social and life skills" came into common use with the publication of the Manpower Services Commission's *Instructional Guide to Social and Life Skills*.

It was also intended that the study group's work should complement a major review of research and development in social and life skills being undertaken by the National Institute for Careers Education and Counselling, with a grant of £15,000 from the further education unit from next year.

NICE's main aim will be to provide a common framework for social and life skills which it will attempt to review and analyse approaches and developments in social education.

Student finance

# Call to simplify grants system mixture

Major changes are needed in the system of student grants and tuition fees to make them less complex and more consistent. This was the main conclusion of last week's conference on student finance, held at North London Polytechnic.

More than 150 academics, educational administrators and students attended the one-day event, sponsored by the Society of Research into Higher Education, the National Union of Students and the TIES. Two plenary sessions and five specialist groups examined the British system of grants as it affects a wide range of students.

On alternative financing arrangements, there was general dissatisfaction with the existing mixture of grants and fees. Mr David Croome, an assistant director of FHE, said afterwards that the conference had demonstrated the need for a national inquiry to establish rational principles for the award of grants in higher education.

The main areas of concern, which were raised several times, were the operation of the discretionary awards system and the growing cost of tuition fees as an element in student support. In both cases large numbers of students, particularly those from overseas, were liable to be priced out of higher education because of the regulations.

A group discussing the problems of overseas students agreed that they should be the responsibility of central government, rather than of local authorities at present. It was felt that a new policy, based on the needs of students, should be established, taking account of educational aid to other countries as well as the allocation of grants.

Other sections considered particularly vulnerable to government policy were mature students and postgraduates, whose courses were often in a precarious state because of their smallness and the discretionary nature of their grant. Fee levels were considered a particular deterrent to mature students, many of whom would be likely to join non-designated courses if Model E of the DCS Brown Paper "Higher Education" was adopted.

However, the greatest source of discontent was the dual system of mandatory and discretionary awards. Examples were given of the variations between local authorities and of wrong interpretations of regulations, but there was no agreement on whether decisions should be taken at national or local level.

Mr Miller called for stricter entry requirements and the early exclusion of students who do not match up to course standards. Failure rates of 25 or 30 per cent in polytechnics were "an absolute scandal", he said.

His other ingredients for success were the abolition of local authority discretion in awarding grants and of the parental contribution, and the abolition of the use of discretionary awards to ensure a more satisfactory distribution of trained manpower.

"It is my firmly held view that higher education is, for any country or nation, a very serious business. It is not a right. It is not a privilege. It is not a fact of the welfare state like the National Health Service."

In recent years tuition fees as a percentage of the cost of education at undergraduate level (now put at £2,500 a year) had risen from less than 5 per cent to almost 20 per cent, he said.

Reports by John O'Leary

# Surrey starts Meas Inc.

The University of Surrey has set up a private limited company to exploit the ideas, inventions and designs which exist or may be developed within the university in the future.

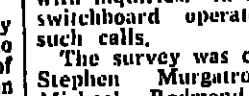
The company, University Business Associates Ltd, will be based at the Hatfield Hotel offices of Mr Ken Joyner who will be its managing director. Mr Joyner, a civil engineer, is already a director of a number of companies.

A spokesman for the university said: "The company will enter into a contract with the originator of an exploitable idea, and will then make up a package of services with commercial or industrial concerns so as to achieve the maximum benefit to the originator, the university and the company."

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# OU struggles with problem of failures who will not quit

Students who refuse to quit courses in spite of repeated failure are causing under scrutiny at the Open University. The sensitive question of whether such students, who may cling on for years without making any substantial progress, should be expelled from the undergraduate courses is being studied by the OU authorities.

The university possesses the power to dismiss such students, but has no formal procedure for doing so. Until now, it has been reluctant to take action against people who may be educationally, as well as financially, deprived, and may be taking courses for therapeutic reasons.

But some academics are now arguing that their influence is damaging, both to the university's reputation and in its effect on other students. Cases have come to light of students who consistently fail courses at the first year foundation level

but have refused to give up. One attempted and failed the arts course six times and the social sciences course twice. Another, who initially passed a foundation course, went on to fail or withdraw from nine other separate courses.

Draft proposals for a new procedure to cope with such students are now being considered. They would be derogated credits in three consecutive years, or to obtain more than one credit over four years. The procedure would be accompanied by an official warning and the right of appeal, but any student eventually deregistered would be barred from taking further courses.

Another group of students will also be affected by the new proposals, the 68,000 who have enrolled and are eligible to take courses but for various reasons have opted not to do so.

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## Grants system changes 'will lessen efficiency'

By Ngalo Crequer

Recent changes in the system of allocating grants to universities, making them inclusive of fees for full-time students, will lead to less efficiency, Sir Charles Carter, vice-chancellor of Lancaster, said in his annual report to the court.

Sir Charles said that in making the change, the University Grants Committee removed "one of the few remaining incentives to efficiency in the university system."

A university which took extra students would now find its UGC grant element in its total income correspondingly reduced.

He said if the change in policy were a preparation for the expected fall in student numbers it was premature. If it were the result of a view that universities, given an incentive to be efficient, try too hard and reduce standards, it was unproven.

"The sinister implication of the change is that, if one removes internal incentives to efficiency, the necessary guarantee of wise stewardship of public money must be provided by detailed central control," he said.

"The central power of the UGC is already in danger of overburdening the wisdom available for its application, and a further increase to that power is a matter for regret."

Sir Charles said that the small increases proposed in student numbers and in money per student allowed, after the period of financial stringency, some room for freedom.

"That freedom must be used well, since the forecasts for later in the 1980s and 1990s give little hope of any such room for manoeuvre. The last chance in this century to correct errors, to adjust loads, to round off teaching programmes and to strengthen new initiatives may be just beginning."

"The prospect for 1990 is of an aging staff with few opportunities of mobility, and with little flexibility provided by retirement."

He said there was ground for concern.



Sir Charles Carter—concerned about the wise exercise of UGC power.

## Warning on language teaching

By Robin McKie  
Science Correspondent

There are to be moves to increase the modern language content of technology-related courses at Britain's higher education centres. Education Secretary Mrs Williams told a House of Commons select committee last week. She warned that the inability of our technologists and industrialists to cope with foreign languages was limiting our attempts to sell products overseas.

"Our modern language teaching is in rather a worrying state," Mrs Williams said. "We are not at the same level as other countries in respect of our capacity to use languages for commercial, marketing, technical and other crucial purposes."

"This country as a trading nation cannot risk a great decline in people with a language competence." Already the numbers of specialists in most languages were dropping—except French which was merely holding its own.

## What students expect from jobs

By Ngalo Crequer

The average student seeks a job which pays well, demands creativity and originality, will be adventurous and will make use of his special abilities and talents. It should offer a stable and secure future, with promotion prospects and without too much supervision.

Status and prestige are not important but most students want to work with people and be socially helpful. These are the initial conclusions of a two-year analysis of "Undergraduate Attitudes to Employment" carried out at the department of educational research at the University of Lancaster.

The project was set up to examine attitudes to employment in industry, commerce and public service, to determine how attitudes are affected by subjects studied, and where they are studied and whether attitudes change if an establishment has a high or low proportion of graduates going into industry.

Mrs Williams was answering questions from members of the Select Committee on European Legislation on three resolutions which proposed that modern language teaching should be improved; that children should be taught more about the EEC; and that students from Community countries should enter higher education centres on the same basis as students from the home country.

However, these proposals did not represent a legally binding approach by the EEC. "We are not talking about Community education policy. We are talking about policies which support individual policies to which the Community makes a contribution," Mrs Williams said.

She told the committee that the EEC was proposing several pilot schemes, which would cost about £3.6m. "I am not sure that this is worthwhile," she said.

Mrs Williams said it was in our interest to back the scheme because, among other things, it would mean more places for our students to study abroad and the EEC would be bearing some of the costs of study. Last year, 1,000 students of modern languages were unable to find places on the continent to study the language of their choice. A total of 2,400 did find places, however.

The DES was also seeking an expansion of the teachers' assistant scheme under which students from other countries, usually from Germany, helped out in British schools. Recently their numbers in the United Kingdom had dropped from 4,200 to 3,400 in spite of the fact that the assistants had a "marked effect" on the success of pupils taking modern language exams.

Under the EEC scheme, an extra 250 assistants a year would be able to take up places in colleges of education and business courses as well as in schools.

However, Mrs Williams warned that the department could not give an undertaking that Community students would be admitted to the same basis as home students because of the present United Kingdom system of discretionary and mandatory awards, although this was now being examined.

Researchers selected four subjects—civil engineering, physics, mathematics and economics—and interviewed or gave questionnaires to 1,243 British male undergraduates in universities and polytechnics.

"They found that attitudes did not vary greatly according to the subject they studied although civil engineers seemed to be more extreme in their views. They were the least likely to change jobs and the least concerned that their work should be free from supervision."

There were some "idiosyncratic" differences between responses from different establishments, but records of high or low graduate recruitment into the industrial sector seemed to make no difference in attitude.

Students mentioned a wide range of jobs in which they were interested and their choices were influenced by family, previous work experience, degree course placements and subjects studied. Many were interested in research as a career. Many wanted to become socially useful, without becoming social workers.

The students were reasonably ambitious: 98 per cent thought they would end up between the middle and top grades of their professions. Nearly a quarter of those who answered this question (some 240) expected to get to the top. Economics students were the most ambitious and mathematics students the least. Polytechnic students are slightly less ambitious than university students.

The study showed that students had stereotyped views of the employment sectors. Industry was most favoured and commerce the least. About one in three rejected the idea of working in the education sector. Polytechnic students mostly favoured industry and least favoured the public sector.

Undergraduate Attitudes to Employment: Analysis of the First Year's Work. The University of Lancaster.

## Working parties set up on OU and its potential output

By Maggie Richards

The future involvement of the Open University in the area of continuing education is to be investigated by several working parties set up last week.

Working parties to examine the university's present contribution to continuing education and its potential output were set up at the first meeting of the OU in its new building on continuing education.

The collaborative nature of the venture was stressed by Sir Walter Perry, the university's vice-chancellor.

Of the 34 members of the delegation, 10 are representatives of external bodies. They include Mr Roy Jackson, of the Trades Union Congress education department; Dr Eric Midwinter, of the National Consumers' Council; Mr Brian Groombridge, director of London University's extra-mural department and Mr

## Canada keen to receive 500 Chinese students



China: anxious to gain new technology

China suddenly anxious to receive its scientific and technical development by sending groups of students and scientists to study in the West, Canadian universities are keen to receive their share of Chinese students.

The People's Republic has asked Canada to take about 500 Chinese students a year, and Donald Jamieson, Secretary of State for External Affairs, has replied that Canada is ready to accept them.

However, whereas the United Kingdom and China have already concluded an agreement under which 80 to 700 Chinese students will be placed in American universities next year, discussions over the Canada-China deal are still in progress.

In some ways, educational negotiations between China and Canada ought to be easier than between China and the United States. For the People's Republic has had full diplomatic representation in Ottawa for several years, while it has only a liaison office in Washington.

China and Canada have also an established student exchange programme which has run successfully for six years. Twenty-five Canadians study in China—mainly in the social sciences and humanities though a few young doctors have gone to study Chinese medicine—and a Chinese came to Canada. The latter are mainly linguists studying English or French, in contrast to the new wave of Chinese students who will be after advanced scientific and technological training.

Therefore, the Chinese have more experience of dealing with Canadian than American universities. They had had no educational exchanges with the United States since the People's Republic was established 30 years ago.

On the other hand, the sensitivity and complexities of the Canadian political structure are enough to confuse any foreign government hoping to reach an educational agreement with Ottawa. Under the Canadian Constitution, all responsibility for education rests with the provinces, and the Federal Government has no department of education—so the Chinese are trying to deal with the Department of External Affairs and the Department of Industry, Trade and Commerce in Ottawa, and with the 10 provincial governments (individually and through the council of ministers of education).

The negotiations are taking place and the fall-out from a row over a contract to educate 500 Chinese students in Canadian universities and colleges. The Canadian Government has no funds to pay for more of its students and academics to visit China. However, the Chinese have indicated that they want to finance lecture tours of China by Canadians working in agriculture, medicine, computer science and chemical engineering.

## Groups urge Supreme Court to overturn state's control

By Clive Cookson

WASHINGTON

Thirty-two educational and civil rights organizations have joined together to urge the United States Supreme Court to overturn a Pennsylvania law that gives the state legislature control over Federal education, research and welfare programmes in the state.

National education leaders such as Jack Peltason, president of the American Council on Education, and John Ryor, and Al Shanker, heads of the country's two big teachers' unions, held a joint press conference here to emphasize the constitutional importance of the issue.

They said that if the Supreme Court does not quash the law passed by the Pennsylvania legislature in 1976, other states anxious to extend their political power will follow Pennsylvania's example, endangering \$80 billion a year in Federal aid to schools, colleges and universities, racial minorities, health, libraries, research institutes, and so on.

Pennsylvania's law requires all funds given by the federal government to public agencies including grants to students and researchers at public colleges to be deposited in the state's general fund. The legislature then has to "reappropriate" each item before the money can be spent.

The Governor of Pennsylvania, Milton Shapp, started legal action to have the law declared unconstitutional soon after it was passed, when the legislature refused to reappropriate funds provided by the Federal Law Enforcement Assistance Administration for a special prosecutor's office in Philadelphia. As a result the office, which Mr Shapp wanted to continue in operation, had to close.

The Pennsylvania Supreme Court ruled last August that by saying the state constitution did give the legislature the right to control

Federal funds. Therefore, Mr Shapp has taken the case to the United States Supreme Court, with the backing of a "friend of the court" brief from the 32 national organizations. The United States Attorney-General, Griffin Bell, and Health, Education and Welfare Secretary Joseph Califano, have been asked to intervene on their side, and many observers expect them to do so.

Mr Shapp and his supporters argue that the legislature is violating two articles of the American constitution. First, the "supremacy clause", invalidating state laws whose effect is to nullify programmes authorized by Congress; and secondly the power of Congress to "provide for the general welfare of the United States".

But most of the organizations that have intervened in the case are less interested in these weighty constitutional questions than in the damaging practical effects of the Pennsylvania law. Although no other state legislature has taken such sweeping control over Federal funds, most legislatures have given themselves some power to review Federal spending in their states.

And Allan Ostler, president of the American Association of State Colleges and Universities, named "one of the worst" of the Pennsylvania-style controls are under consideration.

"Public higher education will be doomed" unless the Supreme Court clearly overrules state reauthorization laws, claims Al Shanker, president of the American Federation of Teachers. For state colleges and universities will be unable to receive Federal aid without approval by the legislature—which can cause long delays—while independent institutions get Federal funds directly.

In 1976 and 1977 the Pennsylvania legislature's reappropriation process delayed Federal student aid so long that students in state colleges star-

ted the academic year unsure whether they would get the basic grants they were entitled to. The colleges have attributed their unexpected fall in enrolment last year to the uncertainty this caused, Mr Ostler said.

"Another result is that research grants in health, science, training for the disadvantaged and minorities, and other grants, have been delayed, and colleges have not been able to meet both state and Federal deadlines and have not been able to receive grants. This has hurt both the national effort to carry out such programmes and the state effort—and lost the state and its people money," he added.

"Colleges in Pennsylvania report a vast multiplication of paperwork and bureaucracy."

A particular problem arises if state colleges or other institutions win unexpected Federal grants when the legislature is not in session. The time limit on the grant may not allow the college to wait for the legislature to return and reappropriate the money—which then has to be returned to Washington, unused.

Pennsylvania's law makes their financial dependence on the state legislature almost total—it not only decides the institutions' basic operating budgets (interestingly Pennsylvania is the only one of the 50 states that has substantially cut its total expenditure on higher education over the past two years) but also has the power of veto over the Federal funds that used to give colleges some financial independence.

Clive Cookson, North American Correspondent, The Times Higher Education Supplement, National Press Building, Room 541, Washington DC 20045, Telephone: (202) 638 6765.

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# BOOKS

## Industrial Europe

Eastern Europe  
by David Turnock  
London, 1978  
ISBN 0 7129 0795 5

Contemporary Industrialization: spatial analysis and regional development  
edited by F. E. Ian Hamilton  
London, 1978  
ISBN 0 582 48592 4

Terms like "economic geography" or "industrial geography" (as exemplified by the Dawson "Studies in Industrial Geography" series) make many of today's geographers cringe, for they seem to be the residue of a backward-looking, purely descriptive approach to the subject, far different from such fashionable fields as "urban studies". Perhaps we cringe too easily; basic information on the spatial distribution of economic activity is, after all, necessary for various practical purposes.

For example, anyone wishing to know what is going on in Eastern Europe, not only geographically but economically and politically, will welcome the information contained in David Turnock's book. He sets industrial developments in a historical perspective, he comments shrewdly on the post-war planning system and, while dealing with the area as a whole rather than splitting it up country by country, the book is not intended as a contribution to the theory of industrial location, but is solidly useful as a source of information.

By contrast the two volumes edited by Dr F. E. Ian Hamilton are specifically directed to the theory and practice of examining the spatial distribution of economic activity. In his introductory essay on "The changing milieu of spatial industrial research" Ian Hamilton rejects as insufficient the attempts from the time of A. Weber onwards to erect theories of industrial location based essentially on the single plant under conditions

of perfect competition. Even the theoretical-quantitative approaches of the 1950s and 1960s are felt not to have changed the intellectual climate in a fundamental sense, since they essentially accepted the existing social and economic order. Today, however, "the spatial study of human behaviour" has entered into an exciting period, of enquiring debate, of "searching enquiry, of re-evaluation."

The excitement rests most of all in the realization that the realist in spatial economic organization in advanced capitalist societies involve the increasing dominance of large corporations with a monopolistic hold on markets, and not at all the theoretically perfect market. Many would agree with this observation, but to Ian Hamilton and many colleagues it leads to the belief that the understanding of the force of these large-scale economic organizations in the shaping of spatial economic processes and patterns demands recourse to a largely Marxist theory of "political economy", integrating the study of economic behaviour with that of the state.

Not all who follow Ian Hamilton will sympathize with the entire conviction of the need for a single over-arching theory of the capitalist nature, Dr Hamilton himself admits that the appreciation of Marxist economic theory tends to be inhibited by political fears related to what he perhaps rather dubiously writes off as an aberrant "glib translation of Marxist-Leninist ideas into practice with the 'siege situation' of the Soviet Union during its phase of 'socialism in one country'". Some readers may feel that more concrete and useful results may be achieved by smaller conceptual advances in more limited and defined fields. If so, they will be entirely happy with the contents of the two volumes, which were for the most part contributed to by the members of the working group on industrial geography of the International Geographical Union.

As usual with such compilations, the contributions tend to escape from the efforts of the editor to give them a measure of intellectual coherence, offering a fairly orthodox and pragmatic approach to problems of industrial location and regional planning. Of the two volumes *Contemporary Industrialization* is primarily directed to the spatial behaviour in Europe, East and West, and the developing world. The companion volume *Industrial Change* is more concerned with the impact of government policies on industrial location and regional development.

It is curious that not the least pragmatic, one might even say technocratic, contributions which are essentially concerned with measuring the results of the centralized planning of economic activity. These contributors show rather little of the weight of concern with spatial equality that we find in some of the westerners. It may be argued that, working in socialist countries, they have no need to. Yet it is curious to find three Polish contributors predicting for their country an increasing concentration of industrial activity.

Clearly much work remains to be done on relating theory and observation in spatial aspects of economic activity, but Ian Hamilton's two volumes take us an important step along the road.

T. H. KIRKIN

## Soviet economy and the West

Productivity and the Social System: the USSR and the West  
by Abram Bergson  
Harvard University Press, £12.25  
ISBN 0 674 71165 3

Professor Bergson is well known not only for his important contributions to welfare economics, but also for his pioneering work in the computation of the Soviet national income, much of it done under the handicap of sparse and inadequate official statistics. More recently he has focused particularly on the comparison of Soviet and Western national incomes, for its own sake and as a means of forming judgements on the relative merits of socialism and capitalism. This volume collects most of his important essays and lectures on this topic.

The book is in three parts. The first, "Planning and Policy", contains three essays—an early assessment of the 1955 Soviet economic reform, an interesting paper outlining for the Soviet economy on the different assumptions about the investment rate and the rate of increase in factor productivity, and a short recent piece on innovation.

Part two is devoted to three papers on comparative levels of output and productivity and part three to four papers on growth rates of output, productivity and consumption (these include Bergson's 1974 Wickless lectures). There is also a fairly long appendix of statistical tables giving the recomputations throughout the book. Overall the author would like this book to supersede his earlier set of lectures, *Planning and Productivity under Soviet Socialism*, published 10 years ago.

National income comparisons between countries with the same economic system are difficult enough. Bergson has to contend with problems in coverage and reliability of statistics as well as

the traditional index number difficulties. In 1955 Soviet GNP was about 27 per cent of American at Soviet prices, but 45 per cent of American GNP at American prices. When the author compares growth rates of output per unit of factor input further problems arise. Inputs have to be aggregated to form a single number, the growth rate of which can be substituted for the growth rate of output to yield the increase in factor productivity. Bergson uses constant weights to aggregate the factor inputs, which is equivalent to assuming a special form of the production function with unitary elasticity of substitution. He derives the weights by imputing to Soviet capital a rate of return of 12 per cent. This is not very satisfactory, especially as recent work by Weitzman and Deasi suggests that the elasticity of substitution in the Soviet Union is substantially lower than unity. Bergson asserts that this makes little difference to his conclusions, but it would be interesting to see a complete set of results on the alternative assumption.

What can comparisons of countries tell us about the efficiency of different systems? Bergson emphasizes that he is comparing the levels or rates of growth of production potential, and not of "welfare". But to interpret even these figures one must form a judgement about the relative impact of the economic system of a country on one hand and its cultural and historical background on the other. This issue was discussed in an interesting exchange between Bergson and Philip Hanson in *Social Studies* in 1971. Bergson recognizes that his own approach, based on what he calls "summary quantification" is anything but comprehensive.

As in many volumes of collected papers, *Productivity and the Social System* contains some repetition. Yet it is an excellent introduction to comparisons of Western and Soviet national income. The last satisfactory section is the first part on planning and policy, which can perhaps be construed as a commentary on the findings which follow.

The essay on economic reforms is rather slight and inevitably dated. The short note on innovation proposes greater rewards for management as the way to stimulate innovation, yet the issue is surely more complex than this. It would be interesting to have a more recent and detailed assessment from Professor Bergson of the state of the Soviet economy.

Martin Cave

## THE INVESTMENT DECISIONS OF FIRMS: PUBLICATION DATE 17th NOVEMBER, 1978.

AUTHOR: STEPHEN J. MCKELL, B.A. (Canterbury), M.Sc. Reader in Economics, London School of Economics, 325-10 Princes Street, London W.C.2E 9JT. ISBN 0 7202 0317 2. £11.00. Cased. ISBN 0 7202 0319 4. £6.95. Paper.

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# BOOKS

## Shakespeare in a nutshell

Shakespeare: the poet in his world  
by N. C. Bradbrook  
London, 1978  
ISBN 0 237 7504 9

Reading a book of no more than 250 pages on Shakespeare, after 50 years of Shakespearean scholarship, might be either a double pleasure of self-indulgence or a double-dilemma of self-indulgence. It is relaxed and yet alert, it is not never casual. Of all the Shakespeare books, and there are many, which have offered to digest Shakespeare into a nutshell, this is the best I have seen.

Professor Bradbrook's oeuvre covers more than 50 years of reading in Elizabethan studies, sifted and registered in her 46 years of teaching (*Elizabethan Stage Conditions* first appeared in 1932, and is still in print). In this book her pen is at the weight of those years of the without ever pressing too hard. It is a brisk book. Digressions and speculations are firmly restrained in the end-notes. The style is neat without being curt—she uses the one-line paragraph skillfully, and cuts the end of the paragraph in the middle of the sentence. It is a pleasure to read a book which is likely to endure as a set of examination papers for years.

So back on Shakespeare, how- ever magisterial (and that, though I am a little of the manner), could it be so contentious somewhere along the way. On matters of fact Bradbrook hardly ever falls into the usual traps: only once "could he" (on page 50) "as into" "did" (page 57). She questions her assertion that Shakespeare could not have written his history plays as a woman, but she rarely weasels, she surely does there, as mischief. On matters

of opinion when she is unorthodox she is invariably challenging, and backs her challenge with the sort of background evidence which is never just circumstantial. As a lesson in how to carry your learning without staggering into digressions this is an exemplary book. She plots her way through the critical fog using her own profound knowledge of the period, with the occasional lamp-post of a remark by Auden, Eliot or Yeats in preference to the professional critics. The book is remarkably free of the latest of contentious issues in which Shakespearean studies are usually bound.

Some plays inevitably get more space than others. *Julius Caesar* and *Henry V* are barely mentioned, but their near neighbour in time, *Hamlet*, gets the most space of all. It is a history of Shakespeare, so the book steps from landmark to landmark. The pages on *Othello* and *King Lear* are excellent. She notes of *Othello*, for instance, that it was the first play to make sexual jealousy something other than comic, and links the point neatly to the play's many reversals of expectation. Her central point on *King Lear*, that it removes all standards of order and justice, is developed by reference to Hammett and the old *Lear* play in ways which are not wholly new but certainly shed a clearer light than before, in less space.

Her vision of *Lear* however does crowd out difficulties elsewhere. The rigour of her view makes her see it as a complete halt in this line of Shakespeare's career. After *Lear*, as she puts it, what was possible? Both her complex and her simple view has in consequence of this view been allocated a place earlier than *Lear*, and is tied to the Gunpowder Plot by some knots which are less than binding. The dating of both plays is imprecise, but 1607 for *Lear* (which Professor Bradbrook accepts) and 1606 for *Macbeth* (which she does not go into) are widely accepted. It is easy to see why, in her analysis of the religious

issues in the two plays, she finds it necessary to refer to *Macbeth* as a religious exercise which *Lear* brings to completion, but it is equally easy to see them in other relationships, or even to see the insistent staidness of *Macbeth* as a pendulum swing against the postivism of *Lear*. And whatever the date of *Macbeth*, there are still the Roman tragedies before the new start can be identified in *Pericles*.

In her preface Professor Bradbrook notes that the anthology of Elizabethan theatre is less developed than its archaeology or iconography. In many respects her own book goes a long way towards disproving the claim. Only in the final section, where she presents *Pericles* and the last plays as largely shaped by the Blackfriars Theatre and Court masques, does her sociology shine with something less than a clear white light.

It is probably true that the Blackfriars had a preponderance of the wealthier clientele, but that did not necessarily make them lovers of masques. Shakespeare's theatre, several of his fellow playwrights, never wrote a masque for the Court. Nor did Beaumont and Fletcher before Beaumont's retirement. Their company did perform at Court, and might even have participated in some of the masques, but the games of Shakespeare's players with the fashion for masquing in his last plays are no more a record of their influence than what he did to earlier fashions (the war-play *Henry V*, for instance, has not a light in it except Ancient Pistol's).

The simplest testimony for Professor Bradbrook's distillation of her Shakespeare is that I can offer is that when I found four pages missing near the end of my copy it was like finding your glass empty when you thought there was still some liquor in it. Every (printed) page of this book is worth the price.

Andrew Gurr

## In defence of literary history

The Discipline of English: a guide to literary theory and practice  
by George Watson  
London, 1978  
ISBN 0 333 23353 0

Brilliant and lively book George Watson writes "for those who want that English is a subject, 'discipline', and in the fullest sense of those words". The book is in two parts. The first part begins with a denunciation of the usual traps: only once "could he" (on page 50) "as into" "did" (page 57). She questions her assertion that Shakespeare could not have written his history plays as a woman, but she rarely weasels, she surely does there, as mischief. On matters

After a section consisting of useful hints on how to do "practical criticism"—of both verse and prose—in a literate and historically sensitive way, there are chapters on how to use libraries and how to write essays, rounded off by valuable notes on further reading. This part of the book is the equivalent for undergraduates of Watson's *The Literary Thesis* (1970), which was meant for postgraduates. Many of Watson's recommendations about critical practice, but his book is not all of practice. For one thing, the level of difficulty varies. The reader who needs to be told in part two what a very perplexing Watson recognizes that it is by referring to the "odd mixture of sophistication and ignorance" in the minds of present-day literary beginners. At any rate, such beginners should be warned that the first five chapters of the book are more controversial than the last three. They give only one side of a continuing debate.

Watson attacks older critics vigorously, but gives few examples of which he accuses them. It is hard to make the cap fit Wimsatt, for example, or the Eliot of *Elizabethan Essays*. What Watson says about the possible objectivity of criticism is, I believe, correct. But he has limited the force of what he says by leaving aside the problem of whether he thinks it has a major, or minor, or no part to play in his ideal discipline.

To judge from his practice he seems to regard serious criticism as primarily interpretative. But a critic has traditionally been sup-

posed to be a judge of art or literature, and if Watson does not hold this view his argument surely requires that he should tell us why he does not. Or if he does, he should say what standards of judgement he recommends. For it is where evaluation is concerned that Watson's subjectivist opponents are most rampant.

Watson does not make it clear what the criticism he dislikes was really trying to do. So far as I can see, the issue was one of relevance. Without doctrines of relevance no subject can advance. The New Critics sought to define them by distinguishing biographical or genetic hypotheses from literary observations. They may have been wrong, but I feel that their case needs more of an answer than Watson gives here.

His assumption that the only alternatives to his own "historical" point of view are non-cognitivist, or anti-cognitivist is worrying. I wish he had said something to counter the view that our knowledge of a great work is actually lessened by attention to particular and local historical circumstances. Might we not learn more from considering it in relation to features of the human situation that change very little, rather than transient ones? Is it not the transcendence of its original context that makes it literature?

These are a few of the queries provoked by Watson's book, which is a brisk foray rather than a balanced treatise. He recognizes that his views involve disagreement, and he welcomes it. And he writes with trenchancy and sparkle that even those who disagree will find themselves enlivened.

W. W. Robson

## Morris conference

William Morris: aspects of the man and his work is a collection of papers presented at the Conference on William Morris held at Loughborough University of Technology in 1977, edited by Peter Lewis. Jack Lindsay opens the collection with an assessment of Morris in general followed by Peter Faulkner on the

poetry, Elizabeth Stride on the prose romances and Ray Waddington on Morris's work as a designer. The conference was held in conjunction with an exhibition and the book includes photographs of the exhibition. The book is published by Loughborough Victorian Studies Group at £1.50.

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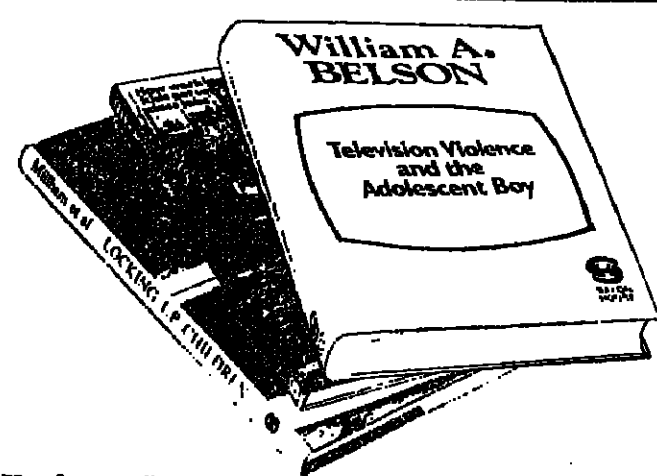
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## Organic chemistry

An Introduction to Organic Chemistry  
by William H. Reusch  
McGraw-Hill, £15.75  
ISBN 0 8162 7161 5  
Vogel's Textbook of Practical Organic Chemistry (fourth edition)  
revised by B. S. Furniss et al  
Longman, £12.50  
ISBN 0 582 44250 8

The book by William Reusch of Michigan State University is an "introduction" only in the sense that it is written for novices. The author offers it as suitable for use in a one-year course (American style) and claims that he has sacrificed breadth rather than depth of coverage.

Reusch follows the well-tried functional group approach. The greater part of the book is devoted to the usual range of functional groups and the remaining chapters to interacting functional groups: non-ionic organic reactions, proteins and amino acids, carbohydrates, and strategy of organic synthesis. There are three valuable tables devoted to useful reactions for the selective introduction of functional groups, commonly used carbon-carbon bond-forming reactions, and acidity constants and pKa values, along with answers to text problems and an index.

Reaction mechanisms appear throughout the text but remain subservient to experimental observation. Spectroscopic procedures are introduced as required. Biosynthetic procedures and natural products (other than proteins and carbohydrates) are covered only briefly. Reusch only refers to heterocyclic compounds in his discussion on aromaticity. He does not attempt to cover their reactions systematically.

It is difficult to judge a book of this kind without using it regularly with a class but a cursory examination suggests it to be a useful text which is no better and no worse than many others. I expect students to have at least one general textbook of organic chemistry—in addition to smaller books on restricted topics—and a student would not go wrong with this one, though it would not be my first choice. If the reader is contemplating a Christmas book as a Christmas present for a student relative I recommend the next book in preference to this one.

Vogel's Textbook of Practical Organic Chemistry was first published in 1948 with second and third editions appearing in 1951 and 1954. Having become clearly out of date the book was clearly in need of revision, and that task has now been effected by five chemists from the institution with which Vogel was associated. The authors claim that it is their intention to reflect changes in the subjects while maintaining Vogel's concept of a one-volume reference text for undergraduates, postgraduates, and the practising organic chemist. I believe they have succeeded.

The book describes experimental techniques (including chromatography), the purification of 24 solvents and 68 reagents, the preparation of aliphatic, aromatic, aliphatic, and heterocyclic compounds (460 in all) and a similar number of inorganic compounds (227 pages), and also contains physical constants (101 pages), eight appendices, and three indices. The third edition has been pruned to make way for new material, such as the sections on chromatography and spectroscopy and 120 new experiments. The safe handling of chemicals is emphasized throughout. The book is a good value for money though some students will be reluctant to pay £17.50 for a single text. Nevertheless it is likely to be used extensively by undergraduates, postgraduates, and other research workers and many will want their own personal copies. Copies purchased for libraries or for shared use in a laboratory may well have to be claimed down.

F. D. Gunstone

## BOOKS

### Adaptations in plants

Plant Physiological Ecology  
by J. R. Ehleringer  
Edward Arnold, £3.70 and £1.80  
ISBN 0 7131 2689 3 and 2690 6

This is one of the latest in the successful "Studies in Biology" series sponsored by the Institute of Biology. In this series several authors appear to have been hampered by the editorial requirement for an emphasis on methods, and suggestions for further reading and practical work within a very restricted length. This book is no exception.

It begins with a short chapter on the definition of plant physiological ecology, which might well have been pursued or simply replaced by the very concise definition given by the author in the preface. The next four chapters are concerned with environmental factors, the penultimate with methods of investigation, leaving only the final chapter on plant responses. This unfortunate bias leaves inadequate space to discuss the mechanisms of adaptation which are the essence of physiological ecology.

The chapters on energy sources and material sources (atmosphere and soil) are also too detailed for the level at which the physiological adaptations are described. It is necessary, for instance, to describe soil profiles when it is only the availability of certain ions at different pH which is discussed subsequently in relation to these particular soil types? It is doubtful whether nutrient cycles are directly relevant to physiological ecology.

The result is that only the last two chapters cover topics which readers might expect to find in a book on the bulk of the information is in small print in large and indigestible tables.

As a whole the book is not very readable, both because of this tendency to cram too much into too little space, and because the continuity is interrupted by poorly positioned figures and tables and numerous references and cross references. Many technical terms are used but not defined; many will not be readily understood by most students, and when Dr Ehleringer occasionally descends from the trum to speak to the younger reader this produces a jarring effect. There are a few errors in the text, but there are some rather misleading phrases such as "under P/E conditions" or "accidental supplementation of a major elemental cycle is named eutrophication".

In conclusion, this book should not be bought as a cheap substitute for more comprehensive texts in this field such as Ehleringer's *Environment and Plant Ecology* or Bannister's *Introduction to Physiological Plant Ecology*. It bears no comparison. It would be interesting to know to what extent the deficiencies are the responsibility of the editors as opposed to that of the author—within the confines of a brief section devoted to physiological ecology he has done a reasonable job—but the balance of the book as a whole is seriously at fault.

Michael Keith-Lucas

### This week's reviewers

Martin Cave lectures in economics at Brunel University.  
T. H. Atkins is professor of geography at Sussex University.  
F. D. Gunstone is professor of organic chemistry at St Andrews University.  
Andrew Gurr is professor of English

at Reading University;  
Michael Keith-Lucas lectures in botany at Reading University;  
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Peter Worsley is professor of sociology at Manchester University.

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# Holland

A special report on the tertiary sector

## Land of the eternal student opens a window on the future

In Dutch higher education affairs it has for a long time now been a case of governments proposing and the universities disposing. Determined efforts over the past two decades by the Dutch government to streamline the tertiary sector have largely foundered in the face of implacable university resistance to change.

Holland has now taken over from Germany as the land of the "eternal student". Seven out of ten Dutch undergraduates take a half year in the average time it takes a student to complete a degree. It is a situation which has been encouraged by a fiercely independent professoriate—which is also the best paid in Europe. At the same time the 125,000 students at the country's 13 universities form a privileged elite when compared with the rest of post-compulsory provision. There is no equivalent, for example, of Britain's polytechnics, and those who do not make it to university have to content themselves with a course at one of the 400 small higher vocational schools, many of which have only about 200 students.

Entry to university is open only to those who have a school leaving certificate from the toughly competitive and selective grammar schools (VWOs); and to become eligible for a place at a highly vocational school students have to have studied for five years at a vocational secondary school (HAVO).

Despite these restrictions about 17 per cent of the 18-24 age group are in some form of education. Numbers have had to be limited in such popular subjects as medicine, veterinary surgery and dentistry. Selection in numerous *fixis* courses for the past few years has been by a controversial weighted lottery—which is now once again under discussion.

Traditionally, political decisions in Holland are arrived at through debate and consensus. The historic deep religious divides in the country make this inevitable. Thus, government is always by coalition and parties split on both denominational and ideological lines. The coalitions are fragile with the two largest parties, the Christian Democrats and Labour, often at the mercy of the plethora of splinter groups. The average life of a government since the war has been around two years.

Yet this continual shuffling of the pack provides a sensitive system of checks and balances which serves to promote the policies of the middle way and produces an overall stability rarely envied in more polarized European democracies.

The consensus has been particularly strong in education. For the past 50 years or so, for example, schools have been on either Catholic, Protestant or "neutral" lines. The Government is obliged to provide a denominational or "neutral" school on the strength of a petition by parents if they can prove a lack of the desired provision in their catchment area. Thus it is not uncommon to find an isolated rural community boasting three primary schools.

This tripartite division is carried over into the higher vocational schools, and it is the zealously and jealously guarded autonomy of these institutions which has pre-



### Paul Moorman takes an overall look at Dutch higher education

vented their merger into more rational units.

At the university level the arrangements are changing. There are the Catholic University of Nijmegen and the Free ("free", that is, from Catholic influence) University of Amsterdam; the rest of the universities are vested in the state and even the two independent ones are totally funded by the State. But the fact of being state-run has not meant that the campuses have bent to the will of the paymaster. On the contrary, government attempts at change by consensus have led to virtually no change at all. The ship of academe has sailed on serenely as administration has followed administration and ministerial plan has succeeded ministerial plan.

Although frustrating to policymakers and some leading educationists, the wasteful situation has been tolerated because of the affluence of the country, largely fuelled by its natural gas and oil. Now, however, the centre-right coalition of Christian Democrats and Liberals, which took over in 1977, has warned of the need to belt-tighten.

This autumn a dose of austerity was administered. Education lost 300m guilders, much of it through the withdrawal of aid for working youth wanting to study and of money earmarked for innovation and teacher guidance.

And the Government has announced that if the universities will not put their own house in order, it will do the job itself. Overlong courses, overpaid academics and the lottery system are its principal targets.

Already it has had a certain measure of success. It has persuaded all the universities except Nijmegen and the Free University to sign a concordat agreeing to take up to 25 per cent more students by 1983 in return for having their budgets pegged in real terms over the period rather than being cut.

Diplomatically, the Education Minister, Dr Arle Pais, a former economics professor from Amsterdam, who is a member of the right-wing Liberals, says the fact that the universities are able to do this is the universities' prior inefficiency; does not imply they were taking part "in a realistic productivity deal".

At present students can in theory study for as long as they like, although there are limitations on the number of years they can continue to get grants and loans. A key argument in favour of the long study period has always been that undergraduates are expected to do a research component. Academics have "always" argued

that they, too, need ample time for their own researches and should not spend more than half their working time teaching (or on "education" as the Dutch call it).

This structure has meant fewer places available than would otherwise have been the case and, it is being said, the production of undergraduates who were often too well qualified in their narrow field to fill the appropriate places in the shrinking job market. It has led, according to progressives, to laziness and privilege—for those who can afford to "play students". Dr Pais's proposal is for a four-year undergraduate course followed by an additional one or two years for research or further professional training for those who would benefit from it. Additionally, there could be a certain amount of work-out at the end of the first year, which would be preparatory in nature.

This coming week the plan is being discussed for the first time by a Parliamentary committee. Predictably, the universities have dismissed it as "unworkable". They point to the greatly increased teaching load (no extra money is to be made available under the four-year agreement), to the additional students on top of the expected 25 per cent increase who might claim the shorter courses made room for them, and to the damage to quality—both to the students and to the academic staff—because of lack of research time.

Under the two-tier plan ("we need to move to the Anglo-Saxon model", says Dr Pais) about 26 per cent of undergraduates might go on to do one further year and 14 per cent to do two years. It is thought that around 7 per cent would eventually be taken on as research assistants.

At present there is no PhD programme as such. Academics prepare their dissertations while working, and it is this which gives further emphasis to their claim for research time. But it is hoped that two postgraduate years would allow a solid foundation for a thesis to be written after perhaps three years as a research assistant. That, by Dutch standards, would be almost indecently quick.

Old university lands say the Minister has no chance of pushing his proposals through. The universities are now insisting that they should be allowed to introduce the five-year courses which they have duced under such protest; but it is generally recognized that this is a delaying tactic to avoid talking about four plus two. The next election is in 1981; and as one senior university administrator cheerfully put it: "We are waiting for the new Minister."

Two main reasons make the universities so unwilling to change. They feel that with the constantly changing governments it is they who know their business best—and they are strengthened in this belief by the fact that ministers themselves often come from the ranks of the professoriate, bringing their well-known hobby horses with them. And the power of the professors remains in many senses almost baronial—in spite of the fact that in 1970, in the wake of the 1969 upheavals, the then government did manage to enact a law splitting decision-making in the University Council, the top policy body, three ways between academics, students and ancillary staff.

In particular, the professors are bolstered by the enormous salaries they earn. These go up to £20,000 guilders a year—more than £30,000 at current exchange rates. Senior lecturers can make up to £4,000 guilders and associate professors up to £10,000 guilders. Junior lecturers usually get a little under £4,000 guilders.

Even by Dutch standards this puts academics in the front rank as salaries go. Understandably there are fears that such a strong position, secured after the war,

continued on page 16

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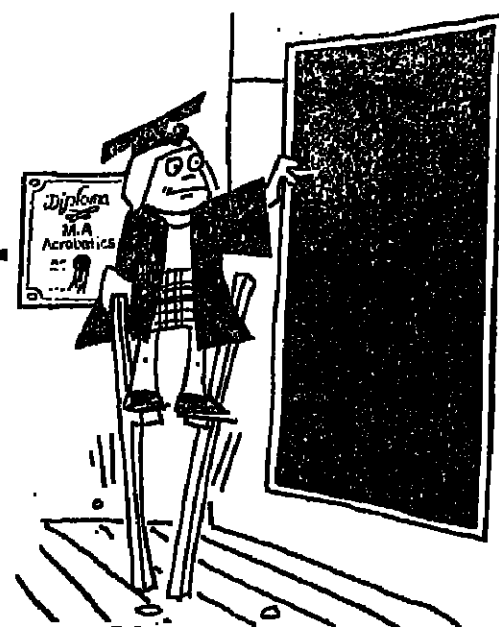


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## John Richardson looks at the vexed question of selection Looking for ways to end the 'numbers racket'

The question of university selection has been a nagging problem which Holland's former Socialist headed coalition government failed to solve. The temporary university enrolment Act of 1972, which introduced the controversial weighted lottery admission procedure for popular subjects, was intended only to give two years' breathing space in which a more permanent admission policy could be established.

The Dutch practice of seemingly endless debate in the search for consensus before operational decisions may be taken is still in progress, although the new Education Minister Dr Arie Paais has insisted that there should be some decision taken in the near future. He has intimated that he is in favour of a movement away from selection by chance to selection by ability.

In principle, any Dutch pupil who has successfully completed the six-year secondary school course is eligible for admission to the first year courses of the universities and technical high schools as well as those of the seven theological colleges.

The standard of the final certificate which ends the national six-year pre-university secondary school course—taken at the "gymnasium" and "atheneum"—is relatively high. It can be compared with the "abitur" in the Federal Republic of Germany, the "baccalauréat" in France, and—despite its greater breadth—British A-levels.

In form, it has some similarity to the international baccalauréat and indeed the British matriculation. Each pupil chooses a study packet of seven subjects, is given a score out of 10 for each in the exam, and must average at least six out of 10 on the total package to pass. In extreme cases this can result in pupils of 21 and over sitting in the senior forms of the secondary schools reopening the sixth year of their course in order to increase their average in the package where the certificate can be awarded.

The higher education institutions do not hold entrance examinations. Admission to the first year is solely on the basis of the upper secondary diploma, or equivalent foreign qualifications, which must include passes in those subjects which correspond to the discipline the student intends to follow in higher education.

Admission to the lower status colleges of advanced vocational education requires at least a diploma from the five-year courses of the higher general secondary schools (HAVOs). But, unlike the universities, the leaving diploma does not give the prospective student the right to enter the colleges, which are free to select according to their own criteria.

Because the demand for some university subjects exceeds supply, the legal right to university education for the atheneum and gymnasium graduates averaging over six points does not lead to a completely free choice of course.

For the past decade a pragmatic Dutch compromise has led to some study directions being subjected to "temporary" restricted entry numbers.

The most frequently affected subjects have been medicine, veterinary science and dentistry. Graduate professions which in terms of both status and their scale of

financial reward stand out, even in the academically favoured upper echelons of Dutch middle class society.

There is much dissatisfaction with the *numerus clausus* situation, although feelings do not run quite as high as in West Germany where last year 850 students gained entry to the Vahlhalla of the West German universities, the medical faculties, by taking a selection based on complex mathematical formulations enforcing their legal right of entry. Prosperous new professional sub-groups, the mathematically accomplished *numerus clausus* advocate, is establishing itself.

This year in the Netherlands, after it first appeared possible that 16 courses would have to be subjected to the quota system, Dr Paais, acting largely on the advice of an academic council (the senior advice body for higher education), decreed that the *numerus clausus* should only apply to 11 lines of study.

The subjects affected in September, 1978, were: medicine (admitting 1,300 out of 4,279); dentistry (121 out of 540 applicants); veterinary science (175 out of 778); physical education (120 out of 129); biology (934 out of 1,226); pharmacy (293 out of 402); physical geography (97 out of 1,331); education (1,581 out of 1,833); history (197 out of 1,115); English (1,518 out of 669); and Spanish (210 out of 269).

It is not only the medical and para-medical faculties which are now under pressure from what still appears, in the Netherlands, to be an ever-swelling stream of applicants. Trade union arts faculties are also over-subscribed and students' unions, which side with the dons in arguing that the *numerus clausus* could be ended by voting the employment of more staff to the public faculties, are worried that this year a social science subject has been affected for the first time.

Other subjects which are likely to be threatened in the near future include law, Dutch, French, the history of art, cultural anthropology and political science, as the universities attempt to accommodate 20 per cent to 30 per cent more students by 1983 without any increase in staff.

The increase in the number of first-year students is now running at about 9 per cent a year, with women taking an ever-increasing share of the places.

Social sciences and the arts were the most popular subjects and technical subjects the least favoured by women.

The possible effect of a drop in the demand for places in the late 1980s, associated with the fall in the Dutch birth rate working its way through to the 18 plus age, is a highly debatable topic, especially in the case of the higher education system.

In the Netherlands, the bottom of the EEC (European Economic Community) figures—according to EEC figures—nearly 240 male students to every 100 females.

For the most popular faculties at present based on a weighted lottery system in which school leavers with the highest grades are given more chances.

This procedure has been defended by arguing that school leaving examinations have a dual role in ending the school course with a qualification.

fiction useful to employers and supplying an entry ticket to universities. They prove an unreliable tool when used to predict the university level success. This has been backed by studies undertaken in Britain, including a recent Council for National Academic Awards publication which indicates that A levels are also poor predictors of degree performance.

Facing up to the reality that quotas were likely to be needed for the foreseeable future, the previous Secretary of State for Higher Education, Dr Ger Klein, in 1975 set up a commission under the chairmanship of Professor Dr E. Wieringa, head of the new faculty of applied education at the technological university of Twente at Enschede, to advise the Ministry on selection procedures. At that time the Minister favoured a system by which some 80 per cent of places would be divided by lottery and 20 per cent linked to a form of ability testing. The commission's advice on this 80 per cent was rather pessimistic, calling for the "least bad" system to stick to the weighted lottery with those who had exhibited a form of higher ability by gaining good university grades.

In March of this year the new Minister of Education appointed his own working group under the chairmanship of Dr. S. Wiegman, a Professor of Psychology at the university of Amsterdam. The group reported back within two months, advocating a rather complex system of selection which could be simply described as offering three different routes into the restricted faculties.

The Wiegman report states that in future two-thirds of the places affected by *numerus clausus* regulations should be distributed on the basis of performance into different types of examination.

Those pupils who average over seven and a half points in the final, school administered, higher secondary leaving examination, and who have studied subjects relevant to the restricted university course, will gain automatic admission.

Applicants averaging below 7½ points will sit a nationally administered examination, probably to be organized by CITO, the national testing centre at Arnhem. This examination will only be in two subjects closely related to the restricted university course.

Points will sit a nationally administered examination, probably to be organized by CITO, the national testing centre at Arnhem. This examination will only be in two subjects closely related to the restricted university course.

It is argued that in some ways it will bring more fairness into the procedures because of the greater likelihood of uniformity of standards with a national administration, and appears to resemble British A-levels in some respects. The remaining third of the places will be allocated by lottery. The debate continues.

However, arguments in favour of more account being taken of ability in the selection procedures, such as a hoped for increase in uniformity of knowledge and academic potential amongst the first years in the pressured faculties, are likely to carry weight with a minister whose policy is to cut the length of degree studies and raise the productivity level of university teaching staff, without leaving his ministry too open to charges of causing a decline in the quality of Dutch graduates.

## 'Unrealistically high' academic salaries

continued from page 15

when industrialization and renewal put the best brains at a premium, could be eroded if the government began "downgrading" university work.

As it is, however, steps are now being taken to rectify what are increasingly being seen as unrealistically high salaries.

At present there are 1,800 full professors in the country as against 1,200 associate professors. The aim is to persuade the universities to appoint more of the latter in future, the goal being to halve the number of full professors. But it is readily admitted that the process will take a decade to have any impact.

Meanwhile, the higher vocational school sector continues to languish in the cold. Under the previous administration a document had been produced promising one unified system of higher education "in the long term". And Dr Paais, in his statement of intent *Higher Education for the Many*, repeats that there is a need to integrate vocational schools and the higher education system.

But it is widely agreed that this is a very low priority and that, for the foreseeable future, these institutions, which are mostly mono-disciplinary, will have to soldier on as second class citizens.

One complaint about the top forms of grammar schools is that the only teachers allowed to teach in them are those who have university degrees: a three-year course at one of the new upgraded teacher training colleges is not enough. The problem has been that the universities do not give teachers training and there has been no incentive for a university graduate to go off on a professional training course. Consequently, the vast majority of senior teachers have no teaching training at all.

Under the new government's four years plus two plan this would be rectified. The universities would give a year's "BEd" course to those graduates who had decided to become teachers. But that scheme, like so much else in Dutch higher education, is for tomorrow.

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## Exchange rates put up price of learning

Nearly all scientific literature in the Netherlands is published in a foreign language: English. And it is aimed at an international market.

This is the fundamental difference between English and Dutch academic publishing: the former capitalizes on the domestic market whereas the latter turns its back on it, due to the small size of the Dutch language area.

A second difference, which Dutch publishers are quick to point out, is that prices of British academic text books are "ridiculously high" by Dutch standards. But then foreign purchasers of Dutch academic books are sometimes frightened off by "fancy" Dutch prices: few hardback books come under £15.

What makes Dutch prices steep on a world market, especially in the United States and England, are current currency fluctuations in regard to the strength of the Dutch guilder plus high production costs. Printing costs may not vary much when compared with England, and Dutch binding costs estimated to be only about 20 per cent higher, but wages are high and employees luxuriate in a package of social securities for which their bosses have to foot the bill.

However, due to continued high standards, especially in printing, and no doubt aided by typical Dutch business acumen, Holland has carved a reputable niche for itself on the world academic book market since the Second World War, with America its major sales outlet.

In fact Elsevier Ltd., a home-grown concern now consisting of a conglomerate of national and international companies, is not only the largest academic publisher in Europe but has cornered the world market in postgraduate information.

Apart from the currency market causing a shaking of heads among Dutch international publishers, there are other clouds over their future fortunes.

One man who has a grasp of the academic market both in Holland and abroad is Paul Nijhoff Asser, secretary of the International Group of Scientific, Technical and Medical Publishers based in Amsterdam and made up of 130 publishers from 19 nations. He explained that while research budgets have remained more or less constant the funds for academic publishers have been whittled down everywhere.

The result is that books are just not selling like they used to, and are lagging far behind the amount of scientific information available. Then, the rise in so-called super-specialist books, have by their very nature not increased sales to keep production costs down.

Photocopying, too, is also eroding the Dutch publishers' market. Although Holland is one of the few countries which has a law stating that while individuals may photocopy for "personal use" groups must pay a remuneration, the measure can be easily flouted. Mr Asser fears that in the long run this could lead to the demise of certain academic journals, especially small ones and those in the humanities, and jeopardise the flow of academic communication.

Apart from Elsevier, Kluwer Ltd and ICU are in the front line of international scientific publishers. Kluwer consists of eight groups of companies and six publishing companies. Its financial backbone is its law and taxation section which may or may not be classified as academic. The academic division consists of nine publishers, including Kluwer-Harrap, in London, and Kluwer-Scholten, in The Hague, which specializes in medicine.

The Kluwer academic book market and ICU, wants to launch out more on an international level.

Sijthoff and Noordhoff International Publishers Ltd in Alphen aan den Rijn, are ICU spin-offs and specialize in English, Staff and Academic Publishers Ltd in Leiden, a sister company, are medical specialists in the Dutch language.

Corcum and Comp Ltd, in Assen, North Holland, was originally a printer's but is now publishing subsidised. As a rule it publishes

Lynn George sees how academic publishers are keeping up standards despite soaring costs

In Dutch, but used foreign authors for the first volume of a series of books it hopes to publish on the Bible's sources entitled *Commentarii Rerum Indicarum Ad Novum Testamentum*. The first book, *The Jewish People in the First Century*, has been widely acclaimed abroad by theologians and historians alike.

The only non-profit making university press in Holland belongs to Pudoc, a centre for agricultural publishing and documents, and attached to the Agricultural "Hogeschool" in Wageningen. Other universities have presses, but these are commercial and usually in the hands of the academic publishers. Of these the Leiden University press is the most important, and comes under Martinus Nijhoff, of the Kluwer organization.

A curious business sideline for Kluwer and Elsevier is that it owns nearly all the important academic bookshops in Holland. This is an historical development. Originally these bookshops were mainly privately owned but ran into financial difficulties and the publishers feared they might lose their selling outlets. The logical sequel to this, booksellers being pressurized by the big concerns to "push" their books, has, in the peculiar climate of Dutch tolerance and stubbornness, not happened.

Lucas Bunge Publishers, in Utrecht, is the smallest of the academic publishers. In fact it is practically a one man business, and has a reputation for Dutch medical and biology textbooks. Lucas Bunge, the man, is 49, used to be director with one of Kluwer's medical publishers, but started up on his own in February.

At the age of 16 he stumbled accidentally upon the book business. His mother cut out an advertisement for an errand boy at one of the "better" bookshops and said: "Isn't this something for you?"

He produces cure books in Dutch for university students, and in his standards and attitudes epitomizes a bygone era in publishing.

"I am an old-fashioned publisher and want books to look like books and not like stencilled leaflets. I do not like to be produced in the old-fashioned way, in lead rather than in one of those horrible typewriting machines. I have a sense of quality. It should all look right."

Because of this, he aims to keep to a staff of five, so that he can be closely involved with each part of the production process.

Because of his wide contacts in the academic field, he knows exactly where his books are going, and aims to produce no more than 20 titles a year. Authors, he believes, are paramount in the whole book process, and have to be coaxed if one is to get the best out of them. He looked slightly aghast at the mention of his authors perhaps having to work to schedules.

At the other end of the scale, stringent submission dates and production schedules are part and parcel of the gigantic Elsevier concern. A family business, it was created in 1880 when a group of publishers joined forces and established the first corporate publishing house in Holland.

Its Scientific Publications Division publishes in English, apart from a few Spanish and Portuguese publications. The four big publishers within the division are Elsevier, Scientific Publishing, North Holland Publishing, Excerpta Medica, and Elsevier/North Holland Bio Medical Press, all in Amsterdam. The division also has important secondary outfits in New York and Lausanne.

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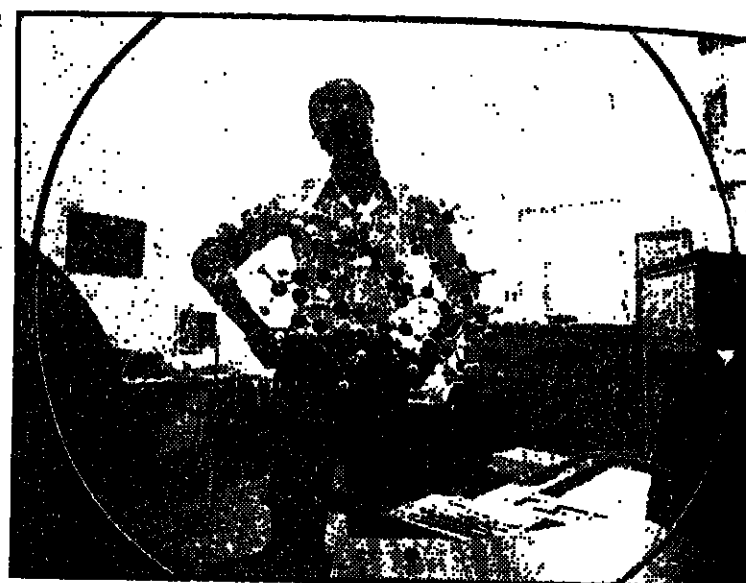
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## Two contrasting centres of learning Delft: Keeping up a tradition of engineering excellence



Organic chemistry in the Chemical Engineering Department at Delft.

The Technical University of Delft is the oldest and most prestigious of the Dutch institutions for higher education which concentrate on the training and education of engineers to a scientific standard equivalent to that provided by those universities offering education in a full range of science, arts and social science faculties.

It may be argued that the high status of the engineer in the Netherlands is linked with the obvious significance of civil engineering to a people largely living on land which is below sea level involved in a constant battle with the sea. A further factor to be considered is the long-established world-wide reputation of the products of the Technical High School, Delft.

Courses leading to the engineers' degree and later to the Doctor of Science are offered in mathematical engineering, civil engineering, geodetic engineering, architecture, mechanical engineering, electrical engineering, chemical engineering, mining engineering, applied physics, naval architecture, aerospace engineering, metallurgical engineering and material science, and industrial design.

The school's closest equivalent in the United Kingdom would be a combination of London's Imperial College of Science and Technology and the Cranfield Institute of Technology.

At Delft the official programme for the engineering curriculum lasts five years but most students take considerably longer to complete their studies.

First-year studies end in most departments with the first part of the preliminary examinations; second year courses culminate in the preliminary part 2. The "candidate's examination", roughly the equivalent of the British BSc degree, but having no legal status as a qualification outside of the Dutch university world, is taken after three or four years of study. After a national five years the post-candidate or doctorate studies, which involve the students in an active period of scientific research, end with the engineers' examination.

Within this "official" course programme a great deal of flexibility exists for the students as to when they really have to take their examinations.

Research done by the statistics department of the Centre for Educational Services at Delft indicates that for that sector of the student population of 1974 which had successfully completed their first-year preliminary examination, only 15 per cent had actually done this within the national one year period allowed.

Further research shows that of a typical student generation at Delft, 90 out of 100 students continue studies on their original course programmes without internal changes of study direction, and 10 change courses. Of the majority group 60 successfully complete their course and graduate as engineers, whereas for those that change courses only five out of 10 graduate. This gives an overall 65 per cent pass rate and a 35 per cent combined failure/drop-out rate.

Of the 35 out of a typical 100 leaving Delft without a diploma, which on the face of things implies a great wastage of expensive resources and individual opportunities, 16 go directly to jobs and 19 continue in some other form of full-time education. Of the latter group, 12 go on to some other university or technological high school of university level, and seven to colleges of higher professional training or other full-time training opportunity. The colleges offer courses which in comparison with those of the technological universities of Delft, Eindhoven and Twente have a smaller theoretical and greater practical component. Of the 19 that have continued their studies after drop-out, 10 eventually achieve an engineering qualification of some kind.

Confronted with the rather simplistic evidence of a 35 per cent failure/drop-out rate, in comparison with a national universities' failure/drop-out rate of just over 25 per

cent, with its implications of inefficiency, Professor F. J. Kivits, a materials scientist just beginning his two-year term of office as Rector Magnificus, pointed out that the technological university had to accept prospective first-year students who had graduated from the Dutch gymnasium and atheneums (grammar schools) without interview or indeed any other selection procedure. Despite general evidence across a broad range of school subjects and university disciplines as to the relationship between grades in the school leaving examinations and university level course success, experience at Delft

taught to show that there was indeed a link between low grades in the preliminary examinations and school leaving level and failure, drop-out and length of time needed to complete engineering studies, in which a high degree of numeracy was a vital prerequisite.

On graduation the Dutch engineer is considered fully qualified to practise his profession. This results partly from the length of his study period but also because of the periods of work experience which are built in to the course.

Early in his studies the aspirant engineer must undergo a period of work experience on the ship floor, and in the post-candidate's research training the student works as a professional man on practical problems of industrial and social relevance. Opportunities for practical work experience abroad exist, and the international association for the exchange of students for technical experience.

Mr N. Schwarz, Rector and Vice-Chairman of the executive committee, emphasized that the keynotes of future policy, in attempting to meet the ever-increasing demands on Delft in a framework which appeared to deny possibilities of significant increases in resource provision, was innovation in co-operation with external bodies.

Joint planning with other educational institutions such as Leyden University, the Erasmus University of Rotterdam, the other technological high schools at Enschede and Eindhoven, and the Dutch colleges for higher professional training in engineering with their four-year practically oriented courses could lead to fruitful rationalization and the streamlining of engineering education to the benefit of all national and European interests.

The Rector also stressed co-operation with industry, and hoped for a more aggressive approach from outside society towards the universities. He said that he was a believer in "technology pull" rather than "technology push".

The Delft technological university has, in the past 10 years, established multi-disciplinary centres in order to meet the demands imposed by society in the fields of external collaboration, and the coordination and integration of approaches to teaching and research.

The Centre for Medical Engineering, helping coordinate projects in which, among others, work the

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## Limburg: Coming in from the cold

Limburg is a thin sliver of territory flanked on one side by Germany and the other by the sea. Maastricht is the last city one travels south through the Netherlands. By the standards of a country like the Netherlands, Maastricht, about three hours by train from The Hague, is out on a geographical limb. Psychologically, the whole surrounding province of Limburg has traditionally felt itself in the cold, too.



Maastricht's medieval gateway.

Maastricht, with 165,000 inhabitants, has always been very much closer to the borders of other countries and their neighbours than any other city in the Netherlands. It has swung this way and that, back to Roman times, it has found itself in the front line of territorial ambitions of the Spaniards, French and

the region's feeling of isolation was deepened in the 1960s when the Government closed down the industry, coal mining, and related resources to developing and gas. Even in the times of prosperity, so the story goes, it was seen as Limburg who worked the mines and the universities in The Hague and Amsterdam and Rotterdam. That was why Limburg felt the motorway.

One of the new compensatory schemes for Limburg proposed by the Government was a university, long called for in the past. It was to begin with a faculty of the sciences, the period of political crisis—the late 1960s and early 1970s—coincided with the beginning of a disillusionment with the education in the minds of Limburg and policy-makers; and it ended with the start of the 1980s.

University of Limburg in Maastricht appointed its first staff in 1973 and opened its doors in the following autumn. It is still only a medical faculty with a second faculty proposed for 1980. A special law has been enacted to allow it to function as a full university; normally a wide range of faculties is necessary. But small though it is, Limburg's youngest university is regarded, in medical education, as a revolutionary centre of

Limburg at Dutch universities to study medicine have been around 2,000 a year per student for several years. Selection by a weighted lottery which those with the best school marks the best chances.

Limburg has grown from 100 to 200 students in its first year and now has a total of over 200—with almost the number of academic and back-staff. Between next year and 1980, enrolments are expected to be around 800. Its learning is to attract some good students and act as a disincentive to others.

Limburg has no lectures and no seminars. The traditional medical system of being taught first the basic sciences, then pathology, clinical work has gone by the wayside. So, too, have old-style exams. The learning is problem-based, largely self-directed and is based on a tutorial framework which is tough going for staff and students alike.

From the start students work with problems. They may take the case of a patient with a chest problem and go on from there to learn about the organs of the chest and how a doctor goes about determining whether they are functioning properly.

The students themselves are determined by how they know. The university uses the steps of professionals and students to show where the answers to the questions can be found.

It is this constantly recurring emphasis on society and illness, on the psychosomatic, which makes Limburg's critics refer to it as a place "for souped up social workers".

But Dr W. H. Wijnen, chairman of the department of educational development and research, is insistent that a thorough grounding in basic medical skills is an essential part of the training.

Paul Moorman

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# Research programmes to be protected as university expansion crisis looms

by John Richardson

As Dutch universities prepare to face a bleak future, with a 30 per cent increase in undergraduates and no matching expansion of staff and other resources, steps are being taken to ensure that research and scientific services to society other than teaching are protected. This year's Ministry of Education policy statement on budgetary provision for higher education, *Anticipated Tasks and Resource Allocations 1979-1983*, has formed the basis for discussions which have led to 10 of the Netherlands institutions for university level teaching and research signing a five-year "rolling" budget agreement with the Ministry.

The policy statement advocates that 40 to 60 per cent of a university's resources should be devoted to teaching, a minimum of 28 per cent and a maximum of 48 per cent to research, and 12 per cent to other tasks such as providing consultancy services to industry and commerce and art-technical terms in classical Greek.

The main criteria for budget allocations are the number of students, the nature of the teaching activities in the disciplines to be studied, the weight of other tasks such as research and consulting services, and a series of agreed norms to fix the proportion between "scientific" staff involved in teaching and research and "non-scientific" staff largely involved in various support services. In the setting up of the plans for the period 1979-1983, staff/student ratios are used as financing norms. These norms differ according to the nature of the university discipline, but not by institution. In other words, the cost of educating a student to degree level in a particular subject must be the same wherever the studies take place. In these calculations, five part-time students make up one full-time equivalent.

The Ministry of Education development plan for higher education shows that in 1977 27,900 arts students had an allocation of 1,480 "scientific" staff for educational tasks, giving a staff/student ratio of 1:18.8. For the science faculties, 11,900 students had 1,450 education staff giving a ratio of 1:8.2; social sciences had 27,600 students with 1,580 staff and a ratio of 1:17.5; medical faculties 13,400 students, 1,120 staff, ratio 1:11.9; and technological subjects 12,000 students, 1,330 staff and a ratio of 1:9. In total, 92,800 students had 6,950 scientific staff members, giving an overall staff/student ratio of 1:13.3.

The forecasts for 1983, according to the 1978 policy statement, envisage a 52 per cent increase in arts students over the numbers for 1977, and allow for a 15 per cent increase in the education staff time of these faculties, giving a likely staff/student ratio of 1:24.8. For the sciences 29 per cent more students are expected to be taught by 7 per cent less staff, with a ratio of 1:11.4; social sciences with 26 per cent more students and 13 per cent

more staff will have a ratio of 1:19.6; medical faculties with 1 per cent less staff will have a ratio of 1:12.4; and technological studies with 24 per cent more students and 6 per cent less staff, a ratio of 1:11.9.

In total, in comparison with 1977, 30 per cent more students will be taught by a scientific staff which has increased by only 3 per cent, giving an overall staff/student ratio of 1:16.9.

However, partly by means of a hoped for 5 per cent increase in the productivity of Dutch dons, research is to be maintained at least the same level of manpower input as for 1977. A vital aspect of this policy is the treatment of research as a factor separate from the provision of education and other university tasks.

In 1977 Dutch universities devoted to research 5,123 man years, 32 per cent of all available scientific manpower. The arts faculties spent 36 per cent of their total time on research; sciences 38 per cent; social sciences 33 per cent; medicine 25 per cent; and technological subjects 34 per cent.

The 1983 forecast allows for an overall 1 per cent increase in manpower input for research tasks, with no increase for the arts; a 2 per cent increase for the sciences; a 1 per cent increase for social sciences; a 5 per cent reduction for medicine; and a 6 per cent increase for technology with its vital industrial role.

The norms to be used for the fixing of the number of "non-scientific" support staff quoted in the 1978 policy statement are those for the revised budget for the universities of 1975. All institutions of higher education are allowed a minimum of 100 support staff for their central service department such as personnel affairs and book-keeping, then more staff in proportion to the number of their "scientific" staff fixed by the weighting of the education, research and other social tasks of their particular faculties.

For every scientific staff member in a theology faculty, 0.43 non-scientific staff are allowed; for a law faculty staff member, 0.49; for a medicine, 1.03; for a physicist, 1.20; for an arts don, 0.48; a social scientist, 0.59; an economist, 0.42; a vet,

2.29; an electro-technologist, 1.86; a chemical technologist, 2.24; a mechanical engineer, 1.73; an architect, 1.10, and all other scientific staff may be supported by 1.45 non-scientific staff.

It is clear that both in terms of future staff/student ratios and all things about tasks and priorities for the 1980s, recognition of the significance of the role that research in hard science and technology must play if Holland is to continue to afford the government expenditure which makes her one of the world's social paradises, as the profits from the sale of natural gas decline.

It will be interesting to see if higher education, one of the most expensive consumption items of the above-mentioned social paradigm, can be increased more effectively to the task of providing the knowledge necessary to create the wealth needed for its own future existence. Perhaps higher education will perform better or at least more explicitly in its wealth creating functions, during the post-industrial, technology based post-industrialism.



Research work at the Technical University of Delft. Top: gastromatographic mass spectrometry in the Department of Chemical Engineering. Above: nuclear magnetic resonance in the same department.

## The £700 set of books which an oil company gave away

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high quality information, world recession bypasses Elsevier's turnover, as the concern is continually finding new markets.

Last year, the division published 305 English language primary source journals at postgraduate level, covering such fields as agriculture, social, and earth sciences. In the same year it had a list of 4,000 titles, including more than 400 new titles and more than 300 reprints.

The scientific publishers, like other ones, find it difficult to peg academic book prices unless they use cheaper printing methods. Between 20 per cent and 30 per cent of their books are now printed directly from the manuscript, and the trend is growing.

The division works closely with a number of Eastern European publishing houses, as the latter's books are often the only source of information on the subject.

One of the most interesting, old-established publishers and printers is Brill Ltd, of Leiden, which also owns E. J. Brill, the academic booksellers in Museum Street, London.

It began as a family firm in 1683, and in 1830 E. J. Brill, the family printer, took it over. Now it is a limited company producing highly specialist books, sometimes in limited editions, on Oriental and classical studies, for an international group of scholars. On a less academic level, it also published the first Dutch version of *Alice in Wonderland*.

It publishes about 150 new titles a year, and as the books are so specialized reprints are rare. About half the books are commissioned by Brill, and the majority of its authors are foreign. The books can cost anything up to £150 each and are sold by direct mail publicity.

For the past 150 years Brill has been a leading publisher of books for the

Mr Thomas Edridge, a New Zealand and former classics teacher in England, is assistant director of Brill. The interesting part of the business and its oldest, is the printing house, where it can print in oriental and classical languages.

"We publish things that other people would not think about publishing. For instance, if someone came to us with a Sanskrit text or a Tibetan translation and a Chinese commentary we would be delighted to publish it," says Mr Edridge.

No one has yet produced such a manuscript, but Brill has published in two volumes a first critical edition ever published of *Commentaries of Eutathius on Homer's Iliad* (loosely translated from the Latin title) written by the Bishop of Salomika in the middle ages. The text is in medieval Greek with a Latin introduction.

Brill's other publishing activities include *Mithras*, a Dutch classical periodical, and it is now working on an encyclopedia of the Middle Ages and of the Renaissance in 20 volumes, which, according to Mr Edridge, should keep them busy for another 10 years.

Indonesia, Brill can still print in Batak, Javanese, and Balinese, as well as in Arabic, Turkish, Chinese and Japanese. One series of books which it has printed in Arabic under the title *Traditions about the Prophet Mohammed* costs £700. "An oil company bought a set of the books and gave them to somebody in the Middle East as a birthday present," Mr Edridge said.

Sometimes it gets non-scholarly requests, and is not so proud to climb down from its lofty printing pedestal to print *Heavenly Bodies* in Arabic.

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## George reports on the Dutch Open University Britain is seen as model for second chance education

launch Holland's first Open University, are going relatively well by Dutch standards. With a world already preoccupied with structural shake-ups and freezes, an Open University is the least likely contender to trigger a major shake-up in education policy-making.

The Open University was decided in March last year. The decision was made by the former dominated coalition Cabinet in recommendation of a joint report from the Open School Council and the Higher Education Council.

It was responsible last year for establishing Holland's Open University, with courses at certain school levels, and aimed at adults and young people from social groups with limited schooling. The latter are to be given a "second chance" to enter higher education, and as such exercises will perform better or at least more explicitly in its wealth creating functions, during the post-industrial, technology based post-industrialism.

The largest target group the Open University hopes to reach are adults over 21 without formal qualifications, but capable of following a higher education course, followed by a second category of adults with the right secondary school diploma, but who have never taken a higher education course. It also hopes to reach a smaller group of higher education graduates.

The Open University is hoping to attract more women students than conventional institutes (in 1976 there were only 31 per cent and 38 per cent women students in university and higher vocational education respectively), and adults from lower social groups (in 1970, 13 per cent of university students were from the working classes).

Dr Maas explained that in all cases there will be no formal entry requirements, although it will be assumed that the level of knowledge students have in the field they wish to study is equivalent to the higher secondary school diploma now needed for certain higher education courses. Applicants will be expected to have at least a pass grade in English, preferably English, because specialized books in Dutch are extremely limited. This prospect, which might unnerve British students, will not worry the Dutch.

What the Open University will actually cost is still a large question mark. Dr Maas said that the aim is to make it cheaper than both university and higher vocational education. "This means we should not go beyond 4,000 guilders (£1,000) on average per student." Because costs will be initially high, due partly to

the intellectual investment involved in writing course material, Dr Maas explained that the Open University is aiming at courses which attract large numbers of students.

Programmes initially will be chosen from four fields of study: languages, social sciences, natural sciences, and technical sciences. Students will have a great deal of liberty regarding what and when they study. There will be no residential summer courses, as this is seen as tying students down too much to schedules.

Dr Maas explained that unlike the British system, material will be split into relatively small, self-contained courses, with each course taking an average student a trimester if he works six or seven hours a week. It is envisaged that an average student with a full-time studying will take two years as a term. Examinations on a voluntary basis (compulsory for students aiming at a diploma) for the courses will be set three times a year.

Because students can study with the Open University for self-interest, it is envisaged that the Dutch model will be less diploma-oriented than the British one. Students can register for one or several courses or an entire programme. Courses, explained Dr Maas, will also be on three levels: foundation, a middle level, and advanced.

The programme will be split into two phases similar to the present university courses. The first phase will be on a level equivalent to three years' full-time study outside the Open University and should take about six years. "At this point we will award a diploma as yet untitled, but it could be the equivalent of a bachelor's degree," said Dr Maas.

The second phase of study will lead to a "doctoratus" degree (conventionally equivalent to an English MA degree). Graduates will also be able to obtain a doctorate with the Open University as well as taking retraining and "refresher" programmes. The committee has opted for written material as the main means of putting across course material, but is still deliberating on support provisions. Television, because it is very expensive in Holland, is not an obvious choice.

Staff would be recruited mainly from higher educational institutes, who would have to be reimbursed by the Open University in cases of seconded staff. This, together with making use of higher education buildings and other facilities, means that the Open University is very dependent on the goodwill of these institutes.

Dr Maas said that the Open University is not as a competitor for the existing system, but as a supplement by providing an alternative for students to study at their own pace, and make the new educational programmes planned for national universities more acceptable, although the Open University should not be seen as an "overspill" system.

Professor Maas announced that the Open University would start in the autumn of 1981. Although this is a second starting date (an Open University was first proposed in 1968, and the ways and means of its implementation were discussed in the legal procedure, but it was not implemented), the Open University will have to be set up in a separate Act, and to be a separate institution, not a part of the existing system, but as a supplement.

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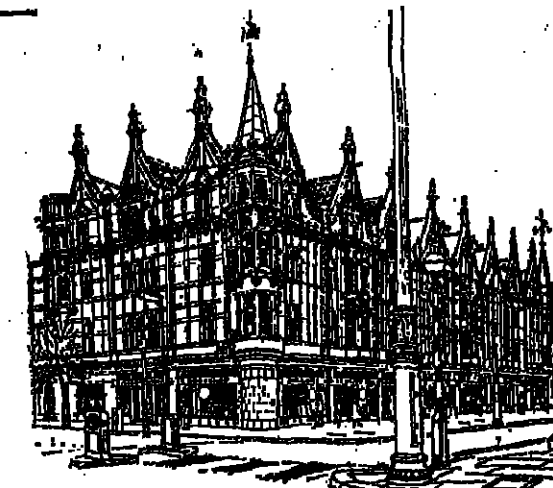
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**PRINCIPAL LECTURER OR LECTURER II—MARKETING STUDIES** Ref: ACA/271/A  
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ULSTER  
POLYTECHNIC

FACULTY OF SOCIAL  
AND HEALTH SCIENCES

(A) LECTURER I OR II  
—DEVELOPMENTAL PSYCHOLOGY

Applications are invited for the above post in the School of Psychology.

The successful applicant will contribute to the teaching of Developmental Psychology in a range of degree and non-degree courses. An interest in Psychobiology would be an added advantage.

(B) LECTURER II  
—MECHANICAL ENGINEERING

Applications are invited for the post of Lecturer II within the School of Mechanical and Industrial Engineering.

The person appointed will have a wide knowledge of Mechanical Engineering and will be expected to contribute to teaching, research and curriculum development. A Chartered Engineer will be preferred. Applications are invited for the following vacancies which arise due to continued expansion of the work of the School of Surveying.

- (C)
1. Principal Lecturer in Quantity Surveying/Applied Technology.
  2. Lecturer I/Senior Lecturer in Quantity Surveying.
  3. Lecturer I/Senior Lecturer in Building Surveying.
  4. Lecturer I/Senior Lecturer in Estate Management.

Applicants should be Chartered Surveyors or holders of equivalent degree or professional qualifications. For Posts 1 and 2 a minimum of 10 years experience is essential. For Post 3 a minimum of 5 years experience is essential. For Post 4 a minimum of 5 years experience is essential. All candidates will be expected to contribute to the research and development programme of the school and to teach to both degree and post-graduate level.

Salary Scales: Principal Lecturer, £7,047-£7,816/£8,444. Senior Lecturer, £5,051-£5,865/£6,372. Lecturer II, £4,101-£4,558. Lecturer I, £3,182-£3,534.

The Polytechnic is a direct grant institution with an independent Board of Governors. It opened in 1971 and now has a student population of some 7,000. It has extensive new purpose-built accommodation, including 750 residential places on the 114-acre campus overlooking the sea at Jordanstown, a pleasant and quiet residential area. There is a school of assistance with removal.

Further particulars and application forms which must be returned by January 6, 1979, for Post A, December 31, 1978, for Posts B and C, may be obtained by telephoning Whitehead (021) 65151, ext. 2242, or by writing to The Establishment Officer, Ulster Polytechnic, Shire Road, Newtownabbey, Co. Antrim, BT37 6DB.

Leeds  
POLYTECHNIC

School of Mechanical and  
Production Engineering  
LECTURER II IN PRODUCTION  
ENGINEERING SUBJECTS

Applicants will be expected to be able to teach on a wide variety of courses up to BSc Honours level and to participate in the development of a Masters Degree. The School also offers excellent facilities for staff to participate in a wide range of research, consultancy and short course work.

Salary Scale: £24,101-£26,558.  
Interested persons who wish to discuss the post informally are invited to contact Dr. R. E. Schofield. Tel: 0532 482743.

The Services Officer (ME13), Leeds Polytechnic, Calverley Street, Leeds LS1 3HE. Tel: 0532 482923. Closing date: 15 December, 1978. Please enclose C.A.E.

TEESSIDE POLYTECHNIC  
DEPARTMENT OF  
CHEMICAL ENGINEERING

LECTURER II OR  
SENIOR LECTURER

Applications are invited for the post of Lecturer II or Senior Lecturer in the Department of Chemical Engineering.

The successful applicant will be expected to contribute to the teaching of Chemical Engineering in a range of degree and non-degree courses. An interest in Process Engineering would be an added advantage.

Salary Scales: Lecturer II, £4,101-£4,558. Senior Lecturer, £5,051-£5,865/£6,372.

The appointment may be made at either Lecturer II or Senior Lecturer level. The maximum salary on appointment, being £7,000.

Applicants should have a BSc (Hons) in Chemical Engineering or equivalent. A high degree of motivation and a high degree of achievement are essential. A high degree of achievement is essential. A high degree of achievement is essential.

Further details and application forms may be obtained from the Senior Academic Personnel Officer, Tel: 01472 32222, Extension 401.

Closing date: 15th December, 1978.

PLYMOUTH  
POLYTECHNIC

HEAD OF DEPARTMENT  
OF  
CIVIL ENGINEERING

Salary Grade V Head - £8,643-£9,603

Application forms and further particulars can be obtained from the Personnel Officer, Plymouth Polytechnic.

Drake Circus, Plymouth, Devon, PL4 8AA

oxford polytechnic

Senior Assistant  
Academic Secretary

(Module Course Administrator)

Grade PO1A salary: £5,727-£6,342 per annum

Graduate or equivalent required to undertake responsibilities for the administration of the C.N.A.A. Modular Degree and Diploma Courses. Closing date 4th December, 1978.

Further particulars and application forms available from the Deputy Administrator, Oxford Polytechnic, Oxford, OX3 0HP.

TEESSIDE POLYTECHNIC  
DEPARTMENT OF  
CHEMICAL ENGINEERING

READER IN  
CHEMICAL  
ENGINEERING

Applications are invited for the post of Reader in Chemical Engineering. The successful applicant will be expected to contribute to the teaching of Chemical Engineering in a range of degree and non-degree courses. An interest in Process Engineering would be an added advantage.

Salary Scale: £24,101-£26,558. Interested persons who wish to discuss the post informally are invited to contact Dr. R. E. Schofield. Tel: 0532 482743.

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Polytechnics continued

LONDON  
THE POLYTECHNIC

PRINCIPAL LECTURER IN  
SOCIAL WORK

Two posts are available: one for a candidate with substantial experience in the field of social work, and another for a candidate with a high degree of motivation and a high degree of achievement. A high degree of achievement is essential. A high degree of achievement is essential. A high degree of achievement is essential.

For further details and application forms, please write to the Senior Academic Personnel Officer, Tel: 01472 32222, Extension 401.

Closing date: 15th December, 1978.

MANCHESTER  
THE POLYTECHNIC

JOHN DALTON FACULTY  
OF TECHNOLOGY

RESEARCH ASSISTANT  
TO WORK ON ONE OF THE FOLLOWING RESEARCH PROJECTS:

1. Digital Systems and Micro-processor Applications.
2. Digital Systems and Micro-processor Applications.
3. Digital Systems and Micro-processor Applications.
4. Digital Systems and Micro-processor Applications.

Applicants should possess a BSc (Hons) in Engineering or equivalent. A high degree of motivation and a high degree of achievement are essential. A high degree of achievement is essential. A high degree of achievement is essential.

Salary Scale: £3,182-£3,534. Further details and application forms available from the Deputy Administrator, Manchester Polytechnic, Oxford, OX3 0HP.

For further particulars and application forms, please write to the Senior Academic Personnel Officer, Tel: 01472 32222, Extension 401.

Closing date: 15th December, 1978.

NEWCASTLE UPON TYNE  
THE POLYTECHNIC

DEPARTMENT OF SURVEYING  
AND CONSTRUCTION

RESEARCH ASSOCIATE  
Applications are invited for the post of Research Associate in the Department of Surveying and Construction. The successful applicant will be expected to contribute to the teaching of Surveying and Construction in a range of degree and non-degree courses. An interest in Process Engineering would be an added advantage.

Salary Scale: £24,101-£26,558. Interested persons who wish to discuss the post informally are invited to contact Dr. R. E. Schofield. Tel: 0532 482743.

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SUNDERLAND  
THE POLYTECHNIC

FACULTY OF HUMANITIES  
DEPARTMENT OF  
BUSINESS MANAGEMENT

PRINCIPAL LECTURER IN  
MARKETING

Applicants should be well qualified academically and preferably have relevant business experience. The post involves teaching marketing mainly to full-time students, including the final year honours degree, with emphasis on the qualitative approach to the subject.

For further details and application forms, please write to the Senior Academic Personnel Officer, Tel: 01472 32222, Extension 401.

Closing date: 15th December, 1978.

RESEARCH POSTS

Applications are invited for the post of Research Associate in the Department of Surveying and Construction. The successful applicant will be expected to contribute to the teaching of Surveying and Construction in a range of degree and non-degree courses. An interest in Process Engineering would be an added advantage.

Salary Scale: £24,101-£26,558. Interested persons who wish to discuss the post informally are invited to contact Dr. R. E. Schofield. Tel: 0532 482743.

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The Services Officer (ME13), Leeds Polytechnic, Calverley Street



Courses continued

UNIVERSITY OF NEWCASTLE UPON TYNE  
M.ED. DEGREE

The School of Education offers one-year full-time courses leading to the degree of M.Ed. by Examination and Dissertation.

Applicants should normally have a degree or advanced diploma, a teacher's certificate and at least one year's teaching or appropriate professional experience.

The following subject options will be available during the session 1979-80:

Single subject courses: History of English Education, Education through Drama.

Two-subject courses (taken in certain combinations): Psychology of Education, Comparative Education, Sociology of Education, Research Methods and Evaluation, Curriculum Theory and Practice, Counselling in Education.

The degree of M.Ed. may also be obtained by Thesis. This involves supervised study in three consecutive terms.

Further particulars and application forms may be obtained from the Secretary, Higher Degrees and Research Division, School of Education, University of Newcastle upon Tyne, St. Thomas' Street, Newcastle upon Tyne, NE1 7RU.

LIBRARIAN MEDICINE

14th-15th December, 1978

A postgraduate course in Librarianship is offered by the University of London. The course will involve many years of study and will lead to a professional qualification. The course is open to students who have completed a three-year undergraduate programme in a relevant subject.

Librarians

OXFORD

THE UNIVERSITY OF

RODLEY'S LIBRARIAN

The University of

London offers a

three-year

undergraduate

programme in

Librarianship

leading to a

degree in

Librarianship

and a

professional

qualification.

The course

is open to

students who

have

completed a

three-year

undergraduate

programme in

a relevant

subject.

Further

particulars

and

application

forms may

be obtained

from the

Secretary,

Higher

Degrees and

Research

Division,

School of

Education,

University

of London,

100 Brook

Street, London

WC1A 9BS.

Closing

date for

applications

Friday,

December

8th, 1978.

Colleges and Departments of Art

NATIONAL COLLEGE  
OF ART AND DESIGN

The College has vacancies for the following academic posts:—

Re-advertisement

Head of Department of Industrial Design

Head of Department of Craft Design

Head of Department of Photography

Assistant Lecturer in Industrial Design

First Advertisement

Assistant Lecturer in Ceramics

Half-time Assistant Lectureship in Fine Prints

Salaries

Head of Department (Lecturer Grade 1) £5895-x9-7965

Assistant Lecturer £5260-x9-7350

The half-time post is to be remunerated at half the Assistant Lecturer salary.

Further details and application forms are obtainable from:

THE REGISTRAR, NCAD,

KILDARE STREET, DUBLIN 2, IRELAND

Tel.: 682911

Closing date for completed applications

FRIDAY, 15th DECEMBER, 1978

Art Historian

Pending final budgetary approval, an Assistant Professorship position in Greek and Roman art is anticipated, concerned primarily with art in its cultural context. For benefit of students in other areas, knowledge of the classical tradition in western art highly desirable. Competence in both Greek and Latin expected. Starting fall 1979. Salary from \$15,000.

Send curriculum vitae and list of publications to Department of History of Art, University of California, Berkeley, CA 94720. The University of California is an Affirmative Action Employer. Deadline: January 1, 1979.

Administration

THE LIBRARY ASSOCIATION  
Bibliographical and  
Information Systems Officer

The Library Association Council has approved the creation of a new post in the Association's Secretariat, working directly to the Deputy Secretary, of Bibliographical and Information Systems Officer. The post will be responsible for the Association's concerns in bibliographical standards and bibliographical systems and services, online development, computer software and hardware development, Vexedat, the creation of a national forum for the discussion of matters related to systems (including Post Office aspects and coding), co-ordination of the user's view of nationally provided services, and also to ensure professional involvement in current international developments in these areas, e.g. Unesco and Council of Europe programmes.

It is expected that the successful applicant, who should be a Chartered Librarian, will have a wide knowledge of general information and bibliographical information systems and services, nationally and internationally, and will have some recent experience of work in on-line systems.

The post offers an exciting opportunity for someone with energy and imagination to work at the centre of this activity.

The salary agreed by L.A. Council is on the Assistant Secretaries scale—£25,000 to £7,497 p.a.

Persons interested should apply in writing to the Deputy Secretary's Department, The Library Association, 7 Ridgmount Street, London WC1A 7AE, for a detailed job description. The closing date for the receipt of applications will be 12 December, 1978.

BIRMINGHAM

THE UNIVERSITY OF

Birmingham offers

vacancies for

the following

posts:

1. Lecturer in

Education

2. Lecturer in

Education

3. Lecturer in

Education

4. Lecturer in

Education

5. Lecturer in

Education

6. Lecturer in

Education

7. Lecturer in

Education

8. Lecturer in

Education

9. Lecturer in

Education

10. Lecturer in

Education

THE LEVERHULME TRUST FUND  
GENERAL ADMINISTRATIVE  
ASSISTANT

The Leverhulme Trust was founded in 1925 and applies its income, currently about £2 millions a year, to the provision of grants, fellowships and scholarships for research and education.

Applications are invited for the post of General Administrative Assistant to provide routine assistance to the Director and the Financial Secretary, to prepare statistical and other information for Trust publications and to deputise for other members of the management staff as necessary.

The appointment, which will be for a limited period of three years, is expected to provide valuable experience to a young graduate contemplating a career in university or similar administration.

The initial salary will be £4,350.

Applications should be submitted in writing not later than 15th December, 1978, to Dr. R. C. Tress, Director, The Leverhulme Trust Fund, 15-19 New Fetter Lane, London EC4A 1NR.

LONDON, E.C.1

THE CITY UNIVERSITY

SCHOOLS LIAISON OFFICER

Applications are invited for

the post of Schools Liaison

Officer in the City

University. The post

will involve liaison

between the City

University and the

City Schools. The

postholder will be

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City University and

the City Schools.

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be responsible for the

LEICESTER

THE POLYTECHNIC

ADMINISTRATIVE OFFICER

Applications are invited for

the post of Administrative

Officer in the

Polytechnic. The

postholder will be

responsible for the

liaison between the

Polytechnic and

the City Schools.

The postholder will

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liaison between the

Polytechnic and

the City Schools.

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be responsible for the

liaison between the

Polytechnic and

the City Schools.

The postholder will

be responsible for the</



# HONGKONG POLYTECHNIC

The Hong Kong Polytechnic is an expanding institution which is now putting into effect a forward looking development plan incorporating a credit-unit approach combined with a self learning system. The basic teaching departments are organized into three Divisions—Engineering, Applied Science and Commerce & Design, and broad, inter-disciplinary centres and Institutes—Textiles & Clothing and Medical & Health Care—which are relevant to the needs of Hong Kong.

The Polytechnic invites applications for the following posts which are tenable from September 1, 1979—

## APPLIED SCIENCE

Principal Lecturers in Applied Physics, Chemical Technology, and Dental Technology.  
Principal Lecturers/Senior Lecturers/Lecturers in Applied Biology.  
Lecturers in Dental Technology and Physics.

## BUSINESS & MANAGEMENT STUDIES

Principal Lecturers in Banking Studies to teach specialized banking subjects.  
Principal Lecturers in Law to co-ordinate the teaching of Law across a number of courses within the Department and the service teaching in specialist aspects in other Divisions of the Polytechnic. To teach Law in at least two of the following areas: Law related to Land Administration, Local Government Law, Contract Law and Arbitration, Industrial Law, Company Law.  
Principal Lecturers in Marketing with experience in the textile or garment industries.  
Senior Lecturers in Insurance and Management Studies.  
Lecturers in Economics and Management Studies.  
(Practical experience in the field, which could be applied research or consultancy, as well as teaching experience is essential for senior posts.)

## BUILDING & SURVEYING

Principal Lecturers in Building Services.  
Senior Lecturers/Lecturers in Building Technology, Quantity Surveying and Valuation/Land Economics.  
(Corporate memberships of the RICS, IOB, IQS and the CIBS are regarded as degree-equivalent qualifications in the appropriate disciplines.)

## CIVIL & STRUCTURAL ENGINEERING

Principal Lecturers/Senior Lecturers in Civil Engineering subjects particularly Structural Design, Geotechnical and Civil Engineering Construction.  
Lecturers in Structural Analysis & Design, Contracts & Specification & Quantities and Engineering Materials.

## COMPUTING SCIENCE

Principal Lecturers/Senior Lecturers/Lecturers in Computing Science. (Preference will be given to applicants with interest in one or more of the following areas: Management Information Systems, Computer Graphics, Computer Education in Secondary Schools, Computer Assisted Instruction, Systems programming and application of computers in inventory control, production control, banking, insurance, hospital systems and all disciplines taught at the Polytechnic; e.g., Engineering, Mathematics, Textiles, Design and commercial subjects.)

# ENGLISH LANGUAGE TEACHING

The British Council

## OVERSEAS CAREER SERVICE

The British Council, which has a responsibility for Britain's cultural and educational relations overseas, will have some vacancies in 1979. The Council is represented in over 80 countries. Overseas Career Service staff must expect to serve wherever they are posted, and to spend two-thirds or more of their working lives abroad.

Staff joining the Overseas Career Service bring with them a wide variety of skills and experience and most appointments are made with a view to promotion on merit to senior posts. The Council has a continuing need for a proportion of new staff with qualifications and experience in ELT, as well as in the other specialist subjects of interest to the Council: science, engineering, bibliography, education, accountancy and finance, for example.

We should like to hear from you if you have not less than two years' experience in ELT, preferably overseas, and possess a relevant postgraduate qualification. An aptitude for languages is highly desirable and knowledge of a hard language, Arabic for example, will be an advantage. An essential requirement is the personal and managerial qualities which overseas representation demands.

Recently, most successful candidates for the Overseas Career Service have been between 25 and 32 years of age; older candidates, up to 40, will be considered if their experience is particularly relevant.

The initial salary is in the region of £5,300, possibly higher for particularly well-qualified candidates and under exceptional conditions of service or in line with those of comparable organizations in the public sector; free accommodation and overseas allowances, including children's education allowances, are provided while overseas.

For further details and an application form, please write or telephone (writing C1) to Staff Recruitment Department, The British Council, 65 Davies Street, London W1X 2AA; telephone 01-499 8011, extension 3041.

## DESIGN

Senior Lecturers/Lecturers in Drawing, Surface Pattern Design, Two-dimensional Design—Graphics/Packaging, Three-dimensional Design—General Product.

## ELECTRICAL ENGINEERING

Senior Lecturers in General Electrical Engineering with specific interest in either High Voltage Engineering or Magnetic/Electric Fields.  
Lecturers in General Electrical Engineering with a specific interest in installation and maintenance.

## ELECTRONIC ENGINEERING

Principal Lecturers/Senior Lecturers/Lecturers in Electronic Engineering.

## LANGUAGES

Principal Lecturers in English.  
Senior Lecturers/Lecturers in French and German.  
Lecturers in English.

## MATHEMATICAL STUDIES

Senior Lecturers/Lecturers in Operations Research and Statistical Methods. (Preference will be given to candidates with knowledge in time series, forecasting and multivariate methods and/or experience in computer applications of operations research and statistics.)  
Senior Lecturers/Lecturers in Mathematical methods and numerical analysis. (Emphasis is on applications.)

## MECHANICAL & MARINE ENGINEERING

Principal Lecturers/Senior Lecturers/Lecturers in Thermodynamics/Heat & Mass Transfer.  
Senior Lecturers/Lecturers in Aeronautical Engineering, Marine Engineering and Fluid Mechanics.

## NAUTICAL STUDIES

Senior Lecturers/Lecturers in Marine Electronics.  
Lecturers in Nautical subjects.

## PRODUCTION & INDUSTRIAL ENGINEERING

Senior Lecturers/Lecturers to teach at least two of the following subjects: Production Technology, Analysis of Manufacturing Systems, Work Study, The Engineer in Society, Polymer Engineering, Quality & Reliability, Physical & Mechanical Metallurgy.  
Senior Lecturers in Industrial Management.

## INSTITUTE OF MEDICAL & HEALTH CARE

Principal Lecturers/Senior Lecturers/Lecturers in Ophthalmic Optics and Occupational Therapy.  
Senior Lecturers/Lecturers in Diagnostic Radiography, Physiotherapy, and Medical Laboratory Sciences—Clinical Chemistry and Blood Transfusion Serology.

## INSTITUTE OF TEXTILES & CLOTHING

Principal Lecturers/Senior Lecturers in Fashion Design, Textile Design and Yarn Manufacture.  
Principal Lecturers/Senior Lecturers/Lecturers in Woven Fabric Manufacture.  
Senior Lecturers/Lecturers in Clothing Technology and Clothing Production.

## SCHOOL OF SOCIAL WORK

Principal Lecturers/Senior Lecturers in Social Work.  
Senior Lecturers/Lecturers in Child Care.  
Lecturers in Social Work (Field Teaching).  
(For all of the above appointments, it will be an important asset if candidates are familiar with the Hong Kong scene in their particular specialities preferably through actual experience in the field. Fluency in Chinese and spoken Cantonese will also be an advantage for all positions and essential for some.)

## CENTRE OF ENVIRONMENTAL STUDIES

The Centre is newly created and will develop, co-ordinate and run courses in environmental studies. It will begin operations as soon as possible, with an initial emphasis in the area of pollution and waste control. An appointment at either Principal Lecturer or Senior Lecturer level will be made. Vacancies also exist at Lecturer level. The leader will build up a small core of staff expertise in the pollution control areas of relevance to Hong Kong. He will be expected to lead in the investigation and formulation of needs and to plan and implement courses in conjunction with Polytechnic departments, industry and Government. He will also be expected to promote effective communication with the parties concerned and to initiate and co-ordinate research and project activities related to the environment. The ability to develop an interdisciplinary field is of considerable importance.

## GENERAL QUALIFICATIONS FOR APPOINTMENT

The Polytechnic also wishes to appoint ASSOCIATED STAFF MEMBERS who, although appointed to a specific academic department, would spend half of their time working within the Polytechnic's Education Technology Unit. Applicants who wish to be considered for these positions should mark their application form 'joint appointment' and detail their curriculum vitae relevant to both their academic background and education technology experience.

## GENERAL QUALIFICATIONS FOR APPOINTMENT

Principal Lecturer:  
(a) a degree or professional qualifications; and (b) an advanced specialist qualification or extensive experience in a specialised field; and (c) substantial teaching and industrial/commercial experience; and (d) proven administrative ability.

Senior Lecturer:  
(a) a degree or professional qualifications, plus preferably an advanced specialist qualification; and (a) at least five years professional experience; and (c) substantial teaching and/or industrial/commercial experience (about three additional years); and (d) proven administrative ability.

Lecturer:  
(a) a degree or professional qualifications or at least a Higher Technician qualification in the appropriate field of study; and (b) at least five years' professional or industrial/commercial experience or at least three years' teaching experience or a suitable combination of professional and teaching experience.

## SALARY SCALES

Principal Lecturer: HK\$98,220 to HK\$121,200 p.a. by 5 increments.  
Senior Lecturer: HK\$79,980 to HK\$107,340 p.a. by 6 increments.  
Lecturer: HK\$44,220 to HK\$79,500 p.a. by 11 increments.

Note: £1 equals HK\$9.85 on October 26, 1978.  
(Compensation policy will be commensurate with qualifications and experience.)

## CONDITIONS OF SERVICE

Appointment will be on two-year gradually-bearing contract terms initially. Thereafter suitable appointments may be offered further contracts or superannuable terms of service at the discretion of the Polytechnic. Benefits include long leave; free passages; subsidized accommodation; medical and dental treatment; children's education allowance; and a terminal gratuity equal to 25 per cent of basic salary received over entire contract period. Application forms and further information are obtainable from the Hong Kong Government London Office, 8 Grafton Street, London W1X 3LB, U.K. Completed application forms should be returned to the same office by December 15, 1978.

## THE BRITISH COUNCIL

Invites applications for the following post:

LECTURER IN ENGLISH (THAILAND)

ABIAN INSTITUTE OF THAILAND

Tenable March, 1979

Qualifications: Degree in English or Modern Languages.

Experience: One-year postgraduate study in English or Modern Languages.

Salary: £5,000 to £6,120 p.a.

Benefits: Free accommodation; free overseas allowances; two-year foreign currency.

Return fares are paid. Local expenses are guaranteed by the British Council.

Please send your application, including curriculum vitae, to the British Council, 65 Davies Street, London W1X 2AA.

## General Vacancies

## THE COLLEGE OF LAW LECTURESHIPS IN LAW

The College of Law invites applications from solicitors for lectureships at the College in London or Guildford. The salary will be within the scale £4,788-£8,004 p.a. (plus a London/Guildford allowance) with the entry point depending on qualifications and experience. Normal annual increments are £288.  
Apply with full personal, professional and academic details and the names of two referees to the Director, The College of Law, 27 Chancery Lane, London WC2A 1NL, from whom further particulars may be obtained.

All advertisements are subject to the conditions of acceptance of Times Newspapers Ltd, copies of which are available on request.

# How Oakes will bring benefits

political spoke signals coming from the Government suggest it is its intention that the Oakes Bill should become law before the end of the Parliamentary session. The higher education in England and Wales ought to breathe a sigh of relief. Higher education in the Oakes Bill; yet that has been subject to more than almost any other piece of legislation. The Oakes Bill has been the subject of a number of constructive criticisms. The Oakes Bill has been the subject of a number of constructive criticisms. The Oakes Bill has been the subject of a number of constructive criticisms.

One of the difficulties for supporters of the Oakes proposals is to explain the need for the proposed system particularly to staff in the colleges. Debates about national planning, resource allocation and institutional autonomy can often seem remote concepts to the average lecturer at the chalk face.

A recent example may help to illustrate how the present structure of public sector higher education militates against the effective dissemination of the Oakes proposals. The Oakes proposals give a reasonable freedom of action in determining their own curriculum. The Oakes proposals give a reasonable freedom of action in determining their own curriculum.

One of the most important aspects of the Oakes proposals is the need for a new element of planning. NATFHE has argued for this so that institutions have plans. All too often in

Hampson on politics

# Need for part-time study

to contribute to a regular column offers more opportunity to confront the issues. The Oakes Bill is not new horizons. Model E is the result of worry over empty places: it is about how to patch up a system still subsiding to terms of reference set by Robbins; it is not about moving higher education towards a new objective—that of recurrent education.

We do nothing but live from hand to mouth. One cannot ask whether policy in a particular area squares with overall objectives because there is no vision; it is the ultimate refinement of ad hocery. One has to try to do no further than fees policy to see it.

If we do cast our gaze forward, there is one thing for certain: the pace of change will go on accelerating. The seemingly impossible is being realized in a shorter and shorter time. The micro-processors revolution poses as many problems for the educational world as it does for that of employment. Education, even to degree level, will not suffice throughout life—if it ever did.

Whatever THE might say, it is in the context of recurrent education that part-time learning should be discussed. It is not just that part-time education is cheaper. It is more flexible, and offers the individual, working adults and married women especially, greater choice. And the motivation of someone with a job seeking a course to advance his or her career, is likely to be greater than that of a traditional "straight-from-school entrant."

Professor Dahrendorf rightly said: "The grants system in Britain is rigged in favour of the young, nobody who has worked up a little late in life and is now looking for a chance to improve his or her position because of job the Oakes Bill is not yet, but it is the

I accept that there are many forms of part-time education, but the Oakes Bill is not yet, but it is the

The author is vice-chairman of the Conservative Party's education committee.

# nalfhe

commence. This places a heavy responsibility on the academic staff who have to ensure that students understand the educational implications of their choice, and that the system is not a mere administrative exercise at the time of year when it is least welcome.

The free market system actively discourages students from making a range of applications, whereas the UCCA system encourages students to consider carefully all the options open to them. In the absence of any central system of information, the student's ignorance of how many other firms competing institutions. To be frank, the system is a mess. It is unfair to the students, unfair to staff, and long overdue for change.

There is an immediate difficulty in finding a forum where such problems can be discussed. The most superficial of considerations is that NATFHE has approached the local authorities as well as the CIPD and forum on which all parties are represented where the major issues will be discussed. This is a major step in making progress. NATFHE's view is that the concept of an admissions system for public sector higher education should be debated between the interested parties. The Oakes national body would provide an arena in which such issues would be resolved.

There is another substantial area where the new national body will be needed. At present, there is no single coherent and powerful voice stating the case for the public sector of higher education. The case for the universities, particularly in relation to resources, is presented by the University Grants Committee.

If the Secretary of State wishes to know whether universities can accommodate additional students in four years time, the UGC can quickly respond. Obviously, both NATFHE and the local authorities can make representations to the student numbers in the public sector, but such representations, which will inevitably differ in emphasis, can be as effective as the UGC. If the national body works properly it will become a powerful property for public sector higher education as well as the national body will have reached agreement within the committee.

Peter Knight

The author is national president of NATFHE and a senior lecturer at Plymouth Polytechnic.

this does not excuse the lack of provision at degree level. The UCCA turned the argument on its head when it declared that because of the Open University, the demand for part-time degrees at the more traditional universities is modest. The problem is more one of institutional values. The history of the OU and Birkbeck College proves that there is a demand for part-time degrees, and given the right incentives this demand would grow.

If we are to be serious about offering chances to working people, and if—as at present—we have not the resources to support working release study time, then the only way forward is to develop on the part-time front, and draw on what facilities we have. A policy for encouraging city universities, and polytechnics to think in these terms is paramount.

Not all universities would be able to contribute significantly to the part-time front—some are physically in the wrong places. But an enormous challenge faces our great urban universities, even though they remain primarily conventional under-graduate and research institutions. The greatest impact will no doubt lie with the polytechnics. There should be a national policy offering incentives that institutions can respond to if they wish to do so.

There can be no "big bang" method of switching to a recurrent pattern. The trick is to find ways of moving forward with policies that can stand on their own while contributing to the ultimate aim. It was with relief therefore that I moved from ploughing through the diatribe of comments of the THE to a dim pamphlet just issued by Richard Hoggart, *After Expansion—Diversity*. He says it all—superbly. And hopefully, logic will at last make itself felt in official circles.

The author is vice-chairman of the Conservative Party's education committee.

# Don's diary

## Birth

The tower cranes have mostly flown from university campuses. Frequent in the 1960s, sightings of these benevolent stalkers are rare now, the species is endangered. You can still see them in Leicester attending the delivery of our medical school. A university adult educationist or extra-muralist has to believe in the impact of his university on its region. Indeed, if he's any good, he has to carry enough of that belief to compensate for more cynical academics. In moments of doubt, the arrival of the medical school is a marvelous consolation. Few universities can have had such an impact on their areas as Leicester by its part in the medical school.

The area was one of entrenched medical deprivation and under-provision. Arrived from Aberdeen in 1962, I found Leicester's four friends slipping off to London for treatment. That felt sinister. I was frightened by the flourishing private practice. I thought—and even said—distribution—that if I could secure a railway ticket. Now, in the late 1970s, the medical school's coming has redeemed the scene dramatically. People don't need or want to pay if they can get a university specialist on the NHS.

## Infancy

With its first students in fourth year, and on the wards, the medical school baby is now an infant. The adult educationist I have had the chance to join medical colleagues in preparing local general practitioners for the task of teaching groups of our medical students. The students themselves have approached me for regular discussions on medical ethics—to be held in their own time. The vibrancy of this initiative would vanish in any attempt to slot the meetings into familiar professional categories of adult or continuing education. Certainly, the activity seems liberal and relevant in the best senses.

Involved thus slightly in the spanking infant growth of the medical school I have one layman's remark. The arrival of the school in this medically under-served area (unless the gods be paid) has induced a social and professional change of unusual magnitude. That change and its implications should have been monitored and researched from the moment of conception.

## Childhood

For an adult educationist, reading the local paper is work. My children do not believe that I have to stop to read the paper. I am studying the Leicester Mercury. A feature of the five university cities I have lived in is senior common room contempt for local papers. The wide range of these cities and their papers suggest that the common factor lies in the chemistry of the academic reader. (Oxford, of which I know little in every other respect.) The late Rex Knight used to tell of the Aberdeen headline, *TITANIC SINKS, ABERDEEN MAN DROWNS*. He understood local newspapers; many academics who succeed do not understand. There is little point in fueling a tit-for-tat, but I can sympathize with journalists who feel that quite a few academics would benefit from a lesson in writing. I liked Richard Hoggart's comment that as an academic task, a newspaper article is not necessarily inferior to a scholarly essay.

## Adolescence

Exploring ethics with adult students is one of the most rewarding educational tasks. With such an audience the textbook or the syllabus are never much of a bolt-hole. The students' experiences are vivid, too pressingly every-day.

to allow discussion simply of well-sculptured arguments. Euthanasia, and you have in your class a nurse of the terminally ill or of the chronic physically and mentally handicapped; censorship, and you have a prison officer from the top security unit; capital punishment, and you have a police inspector. Sexual morality and your adults are sharing adolescent confusions—their own, not worked out at the time, or those which come from the persistent questioning of their adolescent children. It is even more ethical topic with irreverent sixth formers in the afternoon, and with my adult class in the evening. I am often left wondering which part of me is adolescent and which part adult; and I wonder how much adolescent behaviour may be projected into the young to tidy up our own adult confusions.

## Adulthood

Like most academic activities, adult education is too easily locked into the virtue of necessity; the necessity to define and refine its terms. Internal colleagues, solid and senior as well as feeing and junior, pounce on me these days in the SCR and ask with killer tones, "just what does continuing education mean?" What I am more interested to discuss with them is the fascinating spectrum between education and therapy when one is involved in extra-mural work—and in internal work for that matter. I have to be clear that my task, my contract with extra-mural students is at the educational end of that spectrum.

But I am equally clear that adult students use our courses for their own purposes—as is their right. They make contact with parts of themselves as adult persons, with notions of feeling as well as of mind, which have never been available to them in any previous social setting.

## Old Age

In university most of us retire no later than 65. Whatever our students, with some justification may feel, the SCR is not yet a geriatric annex. How long the bitter metaphor can be staved off in the frustration of senior quotas and promotion blocks is another matter. In Leicester University the year 1978 seems to have threatened old age or any hope of it. This year, five professors, two senior lecturers and one lecturer have died in just four weeks. I cannot deduce (though I do notice that Leicester economics colleagues die suddenly more than in any other discipline). But there are theorists who would interpret a run of deaths as a symptom of the organization in which they occur. The public's ready picture of cloisters, groves and feather-bedded academics may need adjusting.

## Death

Non-professional membership of senate gives one an excellent chance to rehearse for sudden death. For three years there is access to all the minutes, to all the information, formal and informal, real and rumoured. Even, sharply, on August 1, the flow of news ceases, your name is deleted from the registrar's addressograph; and the code word "confidential" which honoured you for three years, now, overnight, blanks you out.

It is a most vivid example of the profound theory that all human endings are potential beginnings for the experience of death.

Denis Rice

The author is warden of Vaughan College, and senior lecturer in adult education, University of Loughborough.



Instead, liberal education is the foundation for free and self-contented life in a society whose degree of complexity is rivalled only by the abundance of individual opportunity.